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REVIEW OF MEDICINE

AND PHARMACY.

EDITED BY

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REVIEW OF MEDICINE

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Original Communications.

CLINICAL SURGERY.

By Theodore A. McGraw, M. D., Professor of Surgery in the Detroit Medical College.

1. Foreign Body in the Forearm.

GENTLEMEN—This young man was brought to the clinic by Dr. D. He came under the doctor's care a few days ago with the following history: Seven weeks ago, while at work in a saw-mill, he was wounded by a piece of board, which was thrown against his left forearm with great velocity from a circular saw. The limb was rendered useless, and the physician who was first called diagnosed the case as a fracture of the radius, and, paying no attention to the apparently slight wound of the skin, put on splints. The wound healed and remained closed for several weeks, but the patient suffered great pain, and became, as you see, pale and emaciated. Shortly after he came under the care of Dr. D. the wound broke open and began to discharge matter, and the doctor, suspecting the presence of more evil than is apparent, has brought him here for examination.

On lifting the forearm out of the sling in which it lies, we find it swollen and discolored. About midway on its radial aspect, a small ulcer, not larger than a dime, discharges matter. Its everted edges would indicate that it is the orifice of a sinus leading deep into the flesh. On inserting a probe we feel something abnormal, and on passing the finger over the wound with pressure, we can detect a sharp point belonging to some object movable among the tissues. Grasping this object, I draw it out of the wound, and you see what it is, namely, a splinter of wood some four inches long, half an inch wide and an eighth of an inch in thickness. Passing the forceps again into the wound, I grasp a second piece of almost identical dimensions, and extract it. We will not yet be satisfied with our examination, but, as I can feel no more foreign bodies with the probe, I will enlarge this small wound and insert my little finger. There is no probe so trustworthy as the finger, and as I now desist, I feel confident that we have removed all the trouble, and that the patient will get well.

This case is very instructive, and will, I trust, be carefully borne in remembrance. Few men can realize how large a body can pass into the flesh through a small opening, nor how completely it can be hidden when there by the sliding of the tissues. In this case the wound healed over completely while those large fragments of wood were buried among the muscles.

2. A Case of Retained Testes.

This boy, twelve years of age, was before you last Tuesday, and your attention was called to the several pathological conditions which render him an object of surgical interest. First of all, we inferred from the peculiar shape of his head, with the projecting frontal bones and the malposition of the eyes, that he had been the subject of hydrocephalus, and on inquiry learned that it must have been a prenatal disease, as his head was of this shape when born. He was not brought here, however, to have his head rendered more symmetrical, but to get relief, if possible, from another trouble. You see, as he lies on the table, that both sides of his scrotum are much swollen and enlarged. The tumors extend up into the inguinal canals, and as I press upon them they disappear with a gurgling sound into the abdominal cavity. The diagnosis of double scrotal hernia is therefore easily made. If we now, however, examine the scrotum, we find it to be entirely empty, nor can we any longer discover any swelling in the inguinal canal. It is evident that the testes have never descended to their proper locality, and have not even reached the point of detention common under such circumstances, namely, the inguinal canal, but are still retained somewhere in the abdominal cavity. You are aware, doubtless, that these organs occupy in the earlier periods of fœtal life a position near the kidney, and that they gradually pass down into the scrotum, carrying with them a portion of the peritoneum and of the internal oblique muscle. The mechanism of this descent is as yet not at all understood, and such cases as this are of importance, as indicating some possible causal connection of the nervous centers with the movement. However that may be, the failure of the testes to descend has often two evil results, one of which you see in this case, viz., the occurrence of hernia. The other will probably manifest itself later in life in non-development of the organs and consequent impotency.

The question now arises whether anything can be done for this unfortunate boy. This we can do—we can supply him with a truss which will hold back his protruding bowels, and render his life more comfortable; and this I have done. You see that this truss fits him perfectly, and retains his rupture even when he coughs and otherwise subjects the pads to strong pressure.

3. *Hare Lip.*

This young woman, twenty years of age, has a cleft in the upper lip a little to the left of the median line. The left nostril is also defective, the cartilage deviating to the left side and lacking its proper curve. It is astonishing to me how many adults are content to carry a deformity like this through so many years, when the remedy is so simple and certain. I have twice during the past year seen individuals over fifty years old afflicted with hideous hare lips, who were still debating whether they should submit to the trifling operation necessary for the cure. One reason, perhaps, why such persons hesitate is the fact that there are many cases of failure in the country, which have been operated upon by the old method of cutting away the mucous membrane and bringing the cut surfaces together. Such cases, even where union takes place, do not show results which would encourage new patients to submit to operative procedures. The scar almost invariably draws the lip into a notch by its retraction, and is besides merely a line of hard tissue, lacking the proper thickness of the lip.

Collis' operation remedies these defects of the old methods by changing the line of the scar so that its contraction merely shortens the lip horizontally, and by dovetailing one part into the other, so as to give thickness to the line of union. It has further the great advantage that the traction on the line of union by the facial muscles is exerted in such a direction, and the tension is spread over so much surface, that union rarely fails, even with very young children. There is no other operation with which I would feel so justified in promising a success as that of single hare lip, so rarely have I had trouble with the healing since I have operated by this method. Now, first of all, I will detach the nostril from the edge of the superior maxillary bone, to which it is fastened, and draw it inward, so as to give it proper curve and position. Having done this, I now split the left side of the lip from the apex of the cleft nearly to the corner of the mouth. In doing so I carry the knife along the junction of the skin with the mucous membrane, and divide the tissue until the cut gapes open and presents a cut surface of full half an inch. I now cut a flap from the right side by carrying the knife downwards and outwards from the apex of the cleft through the whole thickness of the lip. Beginning now at the top of the cleft, I unite the cut surfaces, dovetailing the flap of the right side into the fissure which I have made on the left. You see, now that the operation is accomplished, that the line of scar is not perpendicular to the mouth, but runs obliquely from the apex of the cleft to the left corner of the mouth. In this condition I will now leave the patient, putting on neither adhesive plaster nor other dressing, confident that it will heal, and that the final result will be good.

SALICIN IN THE DIARRHŒA OF CHILDREN.

With Notes of Cases. By C. H. Tidd, M. D., Geneva, Iowa.

THE attention of the profession has been so often called to the action of this drug in the above disorders, and its physiological effects so well demonstrated, by many well written articles, that I shall not attempt to rehearse them in this article, knowing that I would probably fail to add anything which would prove useful to my readers, but will content myself with simply giving a report of several cases which have recently come under my observation, and which were treated almost exclusively with this agent; and for an extended account of its action, as compared with opium and other agents, I will beg leave to refer you to a very excellent article from the pen of Dr. J. C. Bishop, of Ohio, which appeared in the July, 1875, number of this journal; also an article from the same gentleman, which appeared in the *Southern Medical Record*, for October, 1874.

It is a well-authenticated fact, that nearly every case of diarrhœa occurring in young children, especially those occurring during the latter summer and early fall months, is caused by, or accompanied with, a debilitated condition of the stomach and bowels, and this same state of the system would, it seems to me, at once suggest to the mind of every thinking practitioner, that, instead of an astringent, or other agent which would tend to lessen the secretion of the stomach and bowels, and consequently the material furnished as *pabulum*, we should administer such drugs as tend to relieve the debility, and which will at once tone the organs at fault, and cause a healthy secretion of the various fluids which are secreted by them, and which are so essential to perfect health, and I know of no better agent to produce just this effect than salicin; and I am confirmed in this belief by having so often seen its good effects in the cases given below, as well as in many other cases which have occurred, both in my own practice and in the practice of others with whom I have conversed.

Having used it in many cases which fell under my observation while practicing in Ohio, and invariably with good success; and finding, upon my arrival here in August last, that there was almost an epidemic of what is commonly called "summer complaint" prevailing in this locality, many cases of which were proving fatal in the hands of the physicians of this county, who, as I found upon inquiry, were treating them almost exclusively with the old routine of opiates and astringents, I was the more strongly inclined to reject their mode of treatment, and to push, as far as possible, the administration of salicin; and I was much gratified with the success which attended its use, as well as eulogized by my patrons, some of whom had lost one or more children during the summer from the same disease, who were treated by our oldest and best physicians, but with the other agents spoken of.

Case I.—Was called on the evening of August 28th to see Charlie R., aged seven years, who had been suffering with diarrhœa for three weeks, during which time he had been treated by two of our oldest practitioners, who had at their last visit, the day before, informed the parents that they had used every article in the materia medica (?) that is ever given for this disease, and without avail, and that, as nothing more could be done, they might expect the boy to die at any moment. I found him very much debilitated, pulse weak and so rapid that it was almost impossible to count it, tongue quite red, temperature high, eyes sunken, urine scanty and high colored, while the alvine dejections were almost constant, seeming to pass without his knowledge; in fact, he did not seem to be cognizant of anything that was passing in the room. Considering the length of time that he had been sick, and the prognosis of those who had had him in charge, I thought the case a very doubtful one; and, it being my first case in the county, I was loth to take charge of it, especially as I could not offer any encouragement to the parents. Yet, after repeated entreaties, I consented to do all I could. I placed him on the following:

℞: Salicin .... ʒss.
Hydrarg. cum Creta .... grs. jss.
Misce. Tt. Chart No. 5. One to be taken every three hours.

He was also to have egg-nog *ad libitum* to sustain strength.

August 29.—Found but little change, although his mother thought that the dejections were not quite so constant, and temperature a trifle lower. Ordered same treatment continued; also to have a little water off of toasted bread if he desired. Visited him again in the evening; found the pulse slower and somewhat stronger than in the morning, and the evacuations less frequent, and changing from a watery to a thick, greenish, pasty mass; urine same, or about the same, as at first visit. Treatment continued, with instructions to give the medicine regularly through the night.

August 30.—Patient seemed decidedly better, bowels moving but three times during the past twelve hours; pulse one hundred and twenty; temperature more nearly normal; urine about normal in quantity and color; and twice during the morning he had asked for some toast and coffee, which he ate with considerable relish. Same treatment continued.

August 31.—Decidedly better, bowels moving but three times since my last visit; pulse one hundred; temperature normal; appetite almost ravenous. Directed him to have castillo powders, boiled in milk, whenever he would have them; to have a powder of the salicin once in six hours only.

September 1.—Patient still improving; was ordered to continue the treatment as per the directions last given, and to let me know if any unforeseen complications arose. From that time until the present he has had no return of the difficulty, and is now in better health than ever before.

CASE II.—Was called on the morning of the 30th of August to see Harry McA., aged three years, who had been suffering for two weeks with a severe colliquative diarrhœa, for which his parents had tried many domestic remedies, besides having twice procured medicine of one of the physicians in Hampton, but to no avail. He was at once placed upon a prescription similar to that used in Case 1, which was continued for four or five days, when he was pronounced convalescent, and made a good recovery. He has not since been similarly troubled.

CASE III.—Was called September 1st to see Eddie C., aged one year, whom I found to be suffering from the same disease, and in about the same manner, as were those reported above. I placed him on the following:

℞:	Salicin	grs. xxiv.
	Hydrarg. cum Creta	grs. ij.
	Glycerin Puris.	℥j.

M. Sig. One teaspoonful every three hours.

In this case I used the glycerine from the fact that it, in a great measure, overcomes the extreme bitter taste of the salicin, so that it is the more readily taken by small children; in fact, children will take the remedy readily when administered in this form, who can not be induced to swallow it in any other form. In this case, as in the others, recovery was rapid.

Case IV.—Was called September 2d to see Bertie M., aged two years, who was suffering from a severe diarrhœa, accompanied with excessive vomiting; in fact, she had for several days retained scarcely a particle of food, either solid or liquid, and was so emaciated that her nearest neighbors scarcely recognized her. To allay the irritability of the stomach, I ordered a mustard draft applied over the epigastrium, and administered small portions of morphiæ sulphas, which had the desired effect in a short time. I then prepared for her a prescription similar to the one used in Case 3, save that I administered six grains of the salicin at each dose, and ordered her to have sherry wine, with raw egg whipped in it, *ad libitum.*

September 3.—Found the patient about the same as on yesterday, save that she seemed stronger and the vomiting had not yet returned. Ordered treatment continued as before, with addition of castillo powders in milk if she desired it.

September 4.—Patient seemed better this morning; passages less frequent and less watery; ate a very little this morning and retained it. Treatment continued.

September 5–8.—Patient still improving; passages nearly normal, and bowels moving only three or four times during the twenty-four hours. Ordered same treatment continued, save that she was to have the medicine only once in six hours.

September 11.—Was told by the father that the diarrhœa had returned again, and that the patient was suffering considerably from colic. Upon investigation, I learned that she had been allowed to eat a considerable quantity of boiled cabbage the day before, and that, within an hour or two after eating it, she had grown worse. I administered a small cathartic, to relieve, if possible, the bowels of any portion of the cabbage that might remain, and ordered the salicin continued (after the bowels had been moved by the medicine), a dose to be given every four hours until relieved. From this time the case progressed rapidly and favorably, and was soon discharged—well.

Following this, I saw some eighteen other cases, notes of which I kept, but which were so similar to those already reported that I will not detail them. Each of the above was treated in about the same manner as were those which I have detailed, and all made rapid and favorable recoveries. The last case I will report was the twenty-fourth that fell under my care during the latter part of the month of August and the month of September, and was the only one of the whole series which proved fatal.

Was called on the morning of September 24th to see Laura S., aged two and one-half years, who was suddenly attacked during the previous evening with severe vomiting and purging, which persisted, in spite of all that could be done by the family, until day-light, when I was sent for. Upon my arrival, I found the patient almost pulseless, with lips and face partially cyanosed, tongue quite red and pointed, urine almost entirely suppressed, extremities cold, respiration quick and hurried. I administered stimulants, ordered her feet bathed in hot mustard water, and prepared for her some powders, each of which contained ten grains of pepsin saccharat., five grains of bismuthi sub. carb., three grains of salicin, and half a grain of hydrarg. cum creta; and of these she was to have one every four hours, but shortly after taking the first powder she expired. The above case was one of interest to me, from the suddenness of the attack, and from its proving so rapidly fatal.

If the above cases prove anything, and our experience is worth anything, they surely prove that the agent referred to is certainly a valuable one in cases of this kind; at least, I deem it worthy a trial by every physician who is called upon to treat cases where the bowels seem to have lost their tonicity. I should like to see the reports of others who have given the agent a fair trial in cases of this kind.

OVARIAN DISEASE, WITH CASES.

By F. K. Bailey, M. D., Knoxville, Tenn.

CASE I.—Some time in the early months of 1873, I was invited by the late Dr. S. D. Moses, of this city, to consult in the case of a woman, aged forty-seven, in regard to the diagnosis of an abdominal tumor. Dr. D. T. Boynton was also present. The subject was of a nervous, bilious temperament, widow, mother of several children, the youngest of which was about five years of age. Has lived in Alabama and Mississippi a portion of the last ten years, and suffered more or less from malarious influences. Stated that she first noticed a hard tumor in the abdomen, but that during the last eighteen months it has increased more rapidly in size.

We found, on close inspection and palpation, a distinct tumefaction to the left side of the mesial line, between the umbilicus and the iliac fossæ, extending somewhat upward toward the spleen, hard to the touch, and immobile to a degree indicating that it was more or less fixed by adhesion to the parietes, if not to the viscera.

The abdomen was somewhat enlarged, and it was then considered to be ovarian. The woman was poor, and having no comfortable home or means of care, the idea of an operation was not entertained, although under favorable circumstances its feasibility appeared obvious.

I saw no more of this woman until Saturday, February 7, 1874. The tumefaction had increased so as to entirely fill the abdominal cavity. An association of ladies had provided a place where proper care could be bestowed upon the sufferer, and for some time she was under the care of Dr. C. Deaderick, in connection with Dr. F. A. Ramsey, who had endeavored to render her condition more endurable. Pain was incessant and severe, and she begged her attendants to operate, even with but faint hopes of success.

On the day mentioned, there met Drs. Deaderick, Ramsey, J. M. Boyd, A. B. Tadlock, R. Knaffl, and the reporter. An operation was decided upon. Dr. Tadlock administered chloroform and ether in equal parts. Vomiting occurred after a few moments, but anæsthesia was soon complete. Dr. Deaderick commenced the operation by making an incision about an inch to the left of the mesial line, two inches below the umbilicus, carrying it down nearly three inches. The sac exposed, a trocar was plunged in, when a thick, amber-colored liquid began to flow freely. Twenty or more pints were collected in vessels, but a large quantity ran out into the bed, rendering it impossible to estimate the full amount.

After the sac was emptied it was found to be closely adherent to the abdominal walls, and the tumor found to lie in its upper portion. The tumor was multilocular, irregular in shape, but rather flattened, and about the size of a large placenta. On incising it at different points, a gelatinous substance escaped, about the consistence of the white of an egg. Upon this enlargement were found flattened scales of calcareous matter, which could be easily detached. The pedicle was very broad, and as the whole morbid formation was so adherent, no attempt was made at removal.

After washing out the cavity with warm water until no discoloration appeared, the opening, which had been extended nearly to the pubis, was closed by means of silver sutures, and all made secure by adhesive strips, carried nearly around the body.

Recovery from the anæsthetic soon ensued, and the woman was placed in bed. The operation consumed seventy-five minutes. The pulse increased in fullness and strength, and the circulation appeared improved. Thirty minims of McMunn's elixir of opium were given in brandy and water. In a few hours the patient was more free from distress than she had been for a long period of time.

I only saw her at intervals after the operation, but her attendant watched the symptoms very closely, calling in every five or six hours for some days. For about three weeks there were strong hopes entertained of a favorable result, but gradually symptoms of peritoneal inflammation began to appear. Slowly failing from day to day, she lingered till March 12th, when death closed the scene.

Post-mortem.—The following are notes which I took at the post-mortem examination, made a few hours after death:

Emaciation extreme; skin of a light icteric hue; visage pinched; lips very thin; countenance still showed marks of distress; lower extremity of the sternum protuberant; epigastric, hypogastric and iliac region sunken. The incision made during the operation had healed, except at the lower commissure, where an opening had been kept for drainage and introducing injections.

Adipose tissue thin and straw-colored. On palpation, there is hardness felt over the hepatic and hypochondriac regions. By compression, a large quantity of thin, purulent secretion escaped, very offensive to the smell. On coming to the sac, it was found that the opening had firmly cicatrized. In the peritoneal cavity, and outside the sac, there was a quantity of urinous-colored fluid, exceedingly offensive. The sac was found closely adherent to the abdominal parietes, and parts adjacent. On cutting through its posterior wall in the right ovarian region, a large amount of very offensive purulent matter escaped. This fluid was contained in a second sac immediately behind the first, and capable of holding ten or twelve ounces.

After minute dissection, the large sac was severed from its connection with the mesentery and intestines, and removed entirely. It was at least three lines in thickness, very firm, and almost cartilaginous in texture. Mesenteric glands indurated and much enlarged; tuberculous deposit extensive in the whole affected parts, including the sac, mesentery and attachments; liver healthy, but adherent to the parietes and stomach; the latter organ much disorganized in all the coats by inflammatory action; gall bladder full; spleen normal in appearance, except a lividity of the upper extremity; right ovary indurated, somewhat small, and discolored externally; uterus healthy, natural in size and in position; internal surface rather pale, and cervix not thickened; urinary bladder healthy, but the sac had become adherent to its walls; left ovary entirely obliterated, or so disorganized as not to be recognizable.

There was a general adhesion of all the diseased organs and formations, rendering it necessary to dissect fully, in order to examine the parts. The intestinal canal was completely collapsed;

no fæces or gas present, accounted for by a diarrhœa which had set in during the last days before death.

A remarkable feature in the above case was that life should have continued so long after the occurrence of such extensive disease. Many of the post-mortem appearances were due to diseased action subsequent to the operation, but there was, and had been for months, an amount of abnormal condition not often met with.

The facts and appearances are given above, without any comments or apologies for the course of treatment.

Case II.—January 5th, 1872, I was called in consultation with Dr. Moses in the case of a woman about twenty, married at sixteen, but has no children. Found her with a large, well defined tumor in the left ovarian region. It was somewhat hard on being handled, and not very tender to the touch. It was first noticed soon after puberty, and, at her marriage, had attained some size. At the time of our joint visit she was suffering from febrile disturbance, constipation, and considerable pain in the tumor.

It was then decided to be a unilocular formation, and probably ovarian. Some remedies of a nature to obviate the general symptoms were suggested, and on calling next day I found her feeling about as well as usual. Within a week I saw her out walking. She was afterwards able to be about most of the time, and I was told from time to time that she only at intervals of weeks was obliged to keep her bed. The tumor gradually increased in size, however, and gave additional trouble in consequence.

January 21st, 1875, I was requested by her medical attendant to call with him to consult in the case, when she was found in a dying condition. On the day previous she had felt something give way in the neighborhood of the enlargement, and at once the tumor began to seem to her as being loose, and rolling from side to side as she turned in bed. But a few hours elapsed before the abdominal cavity began to fill up as with a liquid, and symptoms of an alarming nature supervened. About twenty-four hours had elapsed after the "giving away" had been noticed, and we found the abdomen very hard and full. Pulse small and wiry, beating 140 or more times in a minute. Great distress through the abdomen, and also dyspnea, from pressure upon the diaphragm.

The diagnosis was a probable rupture of the connection of the tumor, with escape of blood or other fluid into the abdominal cavity. The abdomen was so distended that no trace of the tumor could be made. Palliatives only could be employed, and an unfavorable prognosis given. Death occurred at noon on the 22d.

No post-mortem examination could be obtained. The question of a rupture, as suggested, was only hypothetical, but indications appear to favor such an opinion, and no other cause of death was given.

NOVEMBER, 1875.

RESUSCITATION FROM CHLOROFORM NARCOSIS BY NELATON'S METHOD.

By Eugene Smith, M. D., Detroit.

ABOUT a year since, Dr. J. Marion Sims, of New York, read a paper before the British Medical Association on this subject, extracts from which were published in many medical journals throughout the land. The views taken by Nelaton that deaths from chloroform are the result of syncope or cerebral anæmia, have met with opposition, and I am not aware that many cases have been reported of recovery from the narcosis produced by chloroform by the use of the method advised by him. Such cases may have occurred, delicacy (?) preventing the physician or surgeon from reporting the case for the benefit of science.

December 3, 1875, I was consulted by Mr. M., of this city, about the strabismus of his little daughter, aged seven years. I examined the eyes, and made an appointment to operate the same day, about 12 M. Dr. M. gave the chloroform, after the usual manner of giving it—on a folded towel—and the child was slowly brought under the influence of it. At no time during the operation on the first eye was the little patient so thoroughly anæsthetized that she did not move slightly when the forceps or scissors were used, and the operation had several times to be stopped, she so rapidly came out from under its influence. At the completion of the operation on the first eye, observing considerable pallor of the face, we waited a few moments before proceeding, allowing her to come to. It seemed almost impossible to again get her sufficiently anæsthetized to snip the tendon of the other eye. Pinching upon the conjunctiva with the forceps caused the little one to throw herself spasmodically into a sitting posture, and we held the head while snipping the conjunctiva, and part of the time during the tenotomy. Just as the operation was *finished* she seemed to be thoroughly chloroformed, and as we stopped was sleeping beautifully. Suddenly she grew livid and ceased breathing, and there was no pulse, either *radial* or *carotid.* Opening the mouth and artificial respiration for a few moments not having any effect, I took the little one by the ankles and held her inverted, the head hanging down, the heels against my shoulders. Dr. M. made artificial respiration, and after *three or four minutes*—it seemed an age—there was a feeble gasp, and after a while another and another; then the breathing becoming pretty regular, I laid her on the lounge again, but was almost horror-stricken when she shortly ceased breathing again; and the same operations were gone through, with, happily, the same fortunate result in a rather shorter time than at first, and again she was placed horizontally. As Dr. Sims says, "to witness two such painful scenes of danger to a young and valuable life, and to experience such agony of anxiety, produced a tension of heart, and mind, and soul, that cannot be imagined. What, then, must have been our dismay, our feeling of despair, when, incredible as it may seem, the moment the body was again laid in a horizontal position the respiration ceased a third time, the pulse was gone, and she looked the perfect picture of death."

The above was exactly our experience. For the third time I inverted her, thus throwing the blood toward the brain, and again the doctor began artificial respiration. It seemed that she would never breathe again, this interval being the longest of the three, but at last, just as we were about giving up, there was a spasmodic gasp, and after a long time another effort at inspiration, followed by a groan, a gasp and vomiting.

Feeling that she was now coming around all right, I made up my mind to hold her in the inverted position until she was sufficiently recovered to prevent any return of alarming symptoms. When she began to cry, as she did soon after vomiting, I felt safe in again placing her on the lounge, and by dashing cold water in her face kept her crying and prevented her sleeping. There was no further relapse.

I do not think an apology necessary for having detailed the circumstances of this case at such great length, for I believe, with Dr. Sims, "that it goes as far toward establishing a principle of treatment as any case possibly can."

The following quotation from Sims' paper explains itself, and speaks as forcibly for my case as his own: "If the recovery had been complete and perfect with the first effort at reversing the body, there might have been a doubt whether the vertical position was really the cause of resuscitation; but when the horizontal position was again and again followed by a cessation of all evidence of life, and when life was again reëstablished by a position that favored only the gravitation of the blood (poisoned as it was) to the brain, the inference is very clear that death in such cases is due to syncope or cerebral anæmia. Exhaust the brain of blood in any way and death follows. Fill it speedily with blood again and life returns."

Whether death from chloroform is due to anæmia of the brain or not, it is at least safe to try Nelaton's method in all cases of supposed or threatened danger, and I should be inclined to think the neglect of it censurable.

STRANGULATION OF A LOOP OF THE ILEUM BY A BAND OF THE MESENTERY—DEATH BY INANITION.

By Judson Bradley, M. D., Detroit, Mich.

I WAS called, in the evening of the 7th of October, to see M—— S——, a girl six years of age, who was taken ill, as the father stated, soon after dinner of that day. She had previously enjoyed good health. Since dinner she had cried a good deal from pain, and had vomited constantly.

Reaching the house, I found the little patient suffering from what appeared to be flatulent colic, and which I attempted to relieve by opiates and warm fomentations. I should have ordered an enema, but, on inquiry, the means were not at hand to administer it. When the child seemed easier, I left directions for the night, hoping and expecting to find the patient better in the morning.

Early on the morning of the 8th of October, I was informed by the father of the child that she was no better; vomiting almost constant; pain was at times severe, and thirst always urgent. Taking a syringe with me, I went to the house, and found the patient substantially as stated above. The pulse was frequent and small; temperature ninety-eight and one-half degrees; the abdomen soft; no dullness on percussion; no tumor recognized by palpation; in fact, nothing recognizable to account for the obstinate vomiting and severe twinges of pain.

I ordered an enema to clear the lower bowel, but nothing came away except a few lumps of hard fæcal matter. It may be stated here that the child struggled against the medicines, but what little was taken was almost instantly rejected. In the evening I found no change for the better, and ordered another enema. This brought away a considerable quantity of fæcal matter, but did not alleviate the urgent symptoms.

On the 9th the situation was much the same. I had hoped against hope that, what was now certainly to be considered an obstruction of the intestinal tract, might prove to be impaction of fæces. I ordered another enema, but nothing came away save a little intestinal mucus. Carefully reëxamining the patient, I could come to no other conclusion than that I had a case of intussusception, or knot of the bowel. I accordingly told my fears to the parents, who asked for a council, to which I agreed. The council came, agreed in the diagnosis, suggested a belladonna plaster over the region of the cœcum, and increased the quantity of morphia to be given. From this time the patient suffered less, but the main objective symptoms remained the same. Notwithstanding the persistent vomiting, the matters ejected were not stercoraceous at any time during the child's illness.

The patient lingered in this condition about ten days. The temperature was never above ninety-nine degrees, but the pulse grew more frequent as the emaciation increased, until death ended the suspense and watchings of the parents, and put a period to the sufferings of the patient.

Post-mortem Section Thirty Hours after Death.—Rigor mortis well marked; emaciation very complete; the adipose tissue almost entirely absorbed; opening into the abdomen, the omentum was seen devoid of fatty tissue; the largely dilated coils of the ileum were especially noticeable, while the colon was contracted and empty. Searching among the coils of the ileum, I soon brought to light a knot of ileum that was bound by a band of what, on closer inspection, proved to be a portion of the mesentery holding in a peculiar manner about two feet of ileum so closely that nothing could pass, while another portion was bound not so closely but that peristaltic action could go on. The mesenteric glands were found enlarged to a considerable extent, but no other abnormal conditions were noticed. The knot was located about one foot from the cœcum, and lay close to the spinal column on the right side.

Theory and conjecture fail to account for such a peculiar obstruction, and when the question is asked, "How did that happen?" all the reply that can be made is, "I can't tell."

Original Translations.

GLEANINGS FROM FOREIGN JOURNALS.

Translated for the REVIEW by J. Henry Carstens, M. D.

Experimental Researches on the Action of Injections of Water in the Veins. (*By M. Picot, Revue des Sciences Medicale.*)

THE experiments of M. Picot (*Comp. Rend. Acad. Sciences*) were undertaken in the aim of controlling those of Munk and Falk vs. Marbourg, relatively to the power of Traube on the pathogeny of accidental uræmia. It is known that Traube attributes these accidents to the fluidity of the blood, to the great tension of the aortic system by suppression of the renal filtrate—circumstances that produce œdema of the brain.

But if one remembers that a dog in twenty-four hours only excretes 22.5 cc. of urine per kilogramme of his weight, and that in the experiments recalled above, he has had injected an enormous quantity of water, to a point three times the total quantity of blood, it appears difficult to admit in uræmia an exaltation of pressure sufficient to cause œdema of the brain.

But studying the action of injections of water directly on the dog and rabbit, M. Picot arrives at the following conclusions: The injection of water in the veins to a quantity one-thirtieth the weight of the body kills the rabbit, but it takes a quantity equal to one-fifth of its body's weight to cause the death of a dog (by hemorrhagic rupture); but among all animals experimented on till death was produced, nothing went to prove anything like accidental uræmia. As has been already mentioned by Richardson, the water injected in the blood carries its action to the red globules, which it affects in their structure, rendering them unfit for the exchange of the gases. The absence of cephalic lesion must reject the idea of death through the nervous system.

Contribution to Our Knowledge of the Law of Heredity. (By Dr. H. Obersteiner, Med. Chirurg. Rundschau.)

The experiments of Brown-Sequard and Westphal that Guinea pigs with artificial epilepsy (produced by severing the ischiatic nerve) bring forth young that also frequently have epilepsy, have induced Obersteiner (*Wien. Medic. Jahrbuecher*) to raise Guinea pigs from a stock where either one or both parents had been made epileptic by cutting the ischiatic nerve.

Of the thirty-two young that resulted from this stock, two were epileptic, thirteen appeared normal, eleven at birth were very weak and remained so during development, three were paralytic in the hind legs, three showed peculiar opacities and ulcerations of the cornea, probably to be considered as trophic. The three latter also showed the peculiarity that, while with eight other healthy animals, they descended from a healthy mother and an epileptic father, they showed the characteristic color of the latter, while the eight normal young showed no such similarity.

From these facts may be deduced the following laws in reference to the hereditary transmission of pathological changes:

1. The law that acquired accidental deformities, or the resulting symptoms, may be transmitted to the offspring.
2. The law of variability in the transmission of nervous diseases, as these may appear in an entirely different form in the offspring.
3. The law of the preponderance of the paternal influence over that of the maternal.

Reports of Societies.

DETROIT ACADEMY OF MEDICINE.

DETROIT, October 28, 1875.

THE society met at the office of Dr. Inglis, the President, Dr. Gilbert, in the chair.

Dr. SMITH, of Ann Arbor, was introduced to the society.

EXHIBITION OF PATIENTS.

Dr. CLELAND brought before the Academy a little boy nine years of age, who had had scarlet fever in December, 1873. The symptoms were not unusually severe, with hæmaturia at one time. In the spring of 1874 the little fellow was attacked with pleurisy of the left side, accompanied with considerable effusion. After a time, the effusion not disappearing, the doctor decided to evacuate the fluid with the aspirator, but the instrument being defective, he made a free incision, through which flowed about a quart of laudable pus. This opening was made at the middle and posterior part of the thorax. It soon healed up, but a fistula afterwards made its appearance a little below and in front of the thorax, about three inches to the left of the median line, since which time there has been a continued discharge of healthy pus, varying at times in quantity. The incision was made in May, and the fistula occurred in August.

The patient presented, on inspection, a right lateral curvature of the spine, the left lung entirely collapsed, with slight bronchial respiration; there is considerable displacement of the heart to the right, and also some enlargement of the right lung. The appetite was extremely good, the diet being principally animal. Of late the general condition had not improved much. At one time during the effusion, he had not passed urine for a week. The doctor's treatment had been supportive, and he had used injections of iodine into the cavity. He asked for the opinions of members, and also stated that the patient had tape worm, for which he had done nothing as yet, owing to his condition otherwise.

Dr. CONNOR thought that he would wash out the cavity with some mild injection.

Dr. CARSTENS would remove the tape worm at once, regarding it as the cause of the excessive appetite of the patient, and also recommended the washing out of the cavity with a mild injection.

Dr. McGRAW stated that he had a similar case in a man, of two years' standing, where there were two fistulæ, one above the fifth rib, and the other below the thorax. This patient's urine was loaded with albumen, and he thought that kidney troubles were more apt to take place in cases where there was considerable interference with the circulation. The doctor had injected dilute muriatic acid into the cavities with considerable success.

Dr. ARMOR recommended the immediate expulsion of the tape worm, thereby improving the patient's nutrition. He was quite partial, in these pyæmic cases, to large doses of the syrup of the iodide of iron; a teaspoonful three times a day did not interfere with digestion, and was generally borne well by patients. He also related a case in this connection where a child five days old passed pieces of tape worm. The mother was put upon pumpkin seed, and there was expelled from the child about twenty feet of the worm.

Dr. SMITH, of Ann Arbor, stated that in expelling tape worm he had used large doses of turpentine with castor oil—ʒij of the turpentine with a tablespoonful of the oil. He had not experienced any bad effects from so large a dose of turpentine.

Dr. WALKER thought that the injection of a mild solution of permanganate potass. into the cavity would prove beneficial.

Dr. CARSTENS read an interesting paper on "Monstrosities," presenting a specimen of an acephalous fœtus, with spina bifida extending very nearly the whole length of the spine.

Dr. McGRAW stated that, as far as he could remember, all the monstrosities that he had seen were from healthy parentage, and that he had rarely seen any cases from parents that were suffering from any constitutional disease.

Dr. CLELAND remarked that his observations had been quite the opposite of Dr. McGraw's.

Dr. ARMOR remarked that the subject of monstrosity necessarily involved questions of speculative physiology. We have facts of observation, and mere hypotheses to explain them. But although a purely speculative question, it suggested to his mind some exceedingly interesting points of inquiry. The mere arrest of development, so frequently alluded to in the discussion, in reality explains nothing. The question is, what causes the arrest of development—the departure from the type according to which the organic species develops itself? Is it a "freak of nature?" or is there a law of departure definite and fixed as that which governs the typically perfect species? To the latter view he was inclined. We may not be able to demonstrate it; but the intellectual conception of it was, nevertheless, to his mind, clear. Among the principal causes of deviation of type he mentioned: *First*, Something deficient or abnormal in the generative or seminal matter of one or both parents. This generative matter he looked upon in representative light. It was for the preservation of the species, and represented in typical perfection all parts of the organism; there is not a tissue, structure or form, however delicate or dissimilar in character, that is not represented in the generative matter of the parents; so that deviation from the normal type may be impressed at the very moment of conception. We recognize this principle in disease; we believe that morbid action, resulting from structural imperfection, may commence with the very first evolution of the organism in embryonic life. And if this be so, why not recognize the same law in the more noted forms of deviation in the structure of so-called "*monsters*." The next point was the faithful transmission of acquired structural peculiarities, when once fully established. Familiar illustrations were given of this law. We can create, so to speak, new species by a rigid process of in-and-in breeding; and what is this, in fact, but the law of *monstrosity*—the law of disease—the deviation from the type according to which organic bodies develop themselves in their normality? The doctor expressed the belief, in this connection, that by amputating the tails of successive litters of puppies for a long period of time, and at the same time closely in-breeding them, we could by and by produce a distinct species of short-tailed dogs. Now what does this fact prove? Simply that the caudal extremity of the animal ceased finally to be *represented* in the generative matter of the parents. Finally, it was suggested that the discussion of this subject bears directly upon the great question of *evolution*: "the strongest and fittest survives;" weak parts of the organism atrophy and die; they cease finally to be seminally represented. The next cause of monstrosities mentioned was such as operated directly on the fœtus in utero. The generative matter may be perfect and fully represented in both parents, but certain morbid influences may act directly on the fœtus during intra-uterine development. These influences, many of them of a mechanical nature, had already been fully represented. Dr. Armor referred, however, in addition, to the well-known experiments of several observers in producing malformations by submitting hens' eggs to various mechanical influences during incubation. By the same process of reasoning, we can readily believe that certain mechanical influences affecting the fœtus in the early months of pregnancy may produce malformations. In conclusion, Dr. A. believed that all causes of malformation would come under one of two heads: they were either generative or mechanical—sometimes one operating, sometimes the other, and sometimes both.

Dr. **McGraw** thought that many monstrosities might be due to some intra-uterine inflammation, fibrous strings being formed, and producing amputation of the extremities.

Dr. **Gilbert** related a case similar to the one presented by Dr. C., in a French woman. In the earlier part of her pregnancy one of the older children fell from a shed, striking upon its head, which was witnessed by the woman. He was a believer in mental impressions, and regarded this case as coming under that head. This mental impression might be before or during early pregnancy.

Dr. **Shurly** thought that acquired proclivities could be transmitted to the offspring.

Dr. **Carstens** stated that Dr. Miner, of Buffalo, thought club foot was due to pressure in utero where there was a lack of amniotic fluid.

On motion, Dr. Spalding was requested to read a paper on "Inherited Proclivities."

PATHOLOGICAL SPECIMENS.

Dr. **Bradley** exhibited three feet of the ileum taken from a child, showing a constriction where two loops of the intestine had passed through an opening in the mesentery. One of the mesenteric glands was very much enlarged. When the patient was first seen there was considerable vomiting, continuing through the illness, which lasted ten days. Pain was a prominent symptom; no increase of temperature nor any peritonitis. The doctor diagnosed the difficulty intussusception. All remedies failed to produce an evacuation of the bowels, and the patient died from inanition.

Dr. **McGraw** thought that if we could make out the diagnosis, it was justifiable to cut down at once and relieve the difficulty.

Dr. **Bradley** reported as occurring in his practice cases of typhoid malarial fever, accompanied with pneumonia.

Adjourned.

H. O. WALKER, M. D., *Secretary.*

November 14, 1875.

The society was called to order by the president, Dr. Gilbert.

Dr. **Tiffany** was introduced to the society.

Dr. **Inglis** exhibited a membranous cast of the bronchial tube from a patient having croupous pneumonia of the left lung.

Dr. **Gilbert** presented to the academy a portion of constricted intestine removed from a man sixty years of age. The sigmoid flexure was twisted over the descending colon, the constriction being about eight inches from the anus. Dr. G. first saw the patient on Friday morning, suffering from pain in the lower portion of the abdomen. Had taken the day before a large dose of epsom salts, with no effect. There was no marked pain on pressure, and in order to relieve pain gave an injection of morphine hypodermically; also ordered enema of warm water and a mild cathartic. The next day he injected into the bowels seidlitz powders. Sunday morning gave injections of turpentine emulsion. There was at this time considerable distension of the bowels; the pulse was 112, and temperature 98. On Monday the pulse was 140 and temperature 95, and the bowels quite tympanitic. There was also more or less vomiting during the patient's illness. The post-mortem examination revealed extensive peritonitis, and the constriction as already exhibited. Dr. G. said that should he have a case with similar symptoms, he should advocate cutting down and relieving the constriction.

Dr. **Stewart** said that he had frequently had cases with similar symptoms. He immediately put them in hot baths, and injected large quantities of hot water, with patient on the hands and knees, and never failed to relieve.

Dr. **Gilbert** stated that his patient had had attacks of this kind before, which had been relieved with a dose of epsom salts; and would also state in this connection that constipation was habitual with this patient.

Dr. **Stewart** stated that all his cases were habitually constipated.

Dr. **Connor** said that there was great variation in the distention of the descending colon, and we might account for constriction of the bowel by portions of it passing beneath the colon.

Dr. **Yemans** presented a heart taken from a lady thirty-eight years of age, who died from uræmia; had general anasarca for two weeks previous to death, which was relieved by elaterium; could not distinguish any abnormal heart sounds; the present condition of the heart was stenosis of mitral valve, with extensive calcareous deposit; the right auricle was dilated to about four times its normal size; there was pus in the right kidney, with not much destruction of its tissue.

Dr. **Bradley**, who was present at the post-mortem, said he was surprised that the patient had lived so long. There was also fatty degeneration of the ventricles and of the liver.

Dr. **Brown** read an interesting paper upon apoplexy, relating a case which he regarded as past all hopes of recovery, but for some unaccountable reason did recover.

H. O. WALKER, *Sec'y.*

Dr. Eugene Pendleton (*Medical News*, July, 1875) reports the case of a man who survived the fall of 258 feet. Four ribs were broken, radius fractured, humerus dislocated downward and backwards, and severe concussion. An attack of pneumonia followed, but he is now as well as ever.

Correspondence.

REPLY TO THE EDITORIAL IN THE DECEMBER NUMBER OF THE PENINSULAR JOURNAL.

Editors of the Detroit Review, etc.:

GENTLEMEN—We regret the necessity of asking a little space in your columns to correct some mis-statements in the December number of the *Peninsular Journal,* unmistakably, we think, from the pen of the silent partner in the editorial staff, Prof. Maclean. The editor states that two of the former veteran professors, who have stood together for the last twenty years in firmly opposing the introduction of homœopathy into the University, were out of the State at the time of these occurrences, "and knew nothing of the matters until all these arrangements were fully accomplished." We regret the necessity of saying that no one knows better than Dr. Maclean, for he was present at all the meetings of the faculty, that both Drs. Palmer and Ford were present at two meetings of the faculty, called during the period of the discussion of the homœopathic question before the Legislature; the first meeting having been called at the instance of Drs. Ford and Douglass, to induce the other members of the faculty to unite with them in making some concession to the homœopaths by which the school or college might be brought in connection with the University. (The Senate bill recently introduced contemplated its location elsewhere.) The second meeting, at the instance of Dr. Douglass alone, to invite the acquiescence of the faculty in the passage of the homœopathic act by the House, contemplating its location at Ann Arbor. For the correctness of these statements we refer to the records of the faculty. If, under these circumstances, Drs. Ford and Palmer can truthfully be said to have been absent, and knew nothing of these matters until all these occurrences had transpired, then these gentlemen must have been strangely inattentive to events in which they were deeply interested, and in which, as has been shown, they actively participated.

But if reference was merely made to the meeting of the faculty, at which the homœopathic plan was submitted to them, and to which, as Regent Rynd asserts, "no serious objections were interposed by the faculty," then the editorial statement is technically correct; but as Dr. Ford had previously shown a warm interest in having the homœopathic college brought to the University, and, as currently reported, has unequivocally expressed his approval of the "act" of the regents, he could with the greatest propriety be counted as present at this meeting and in harmony with its action. Dr. Palmer alone of the teaching faculty was absent. For valid reasons of a private character, the Dean was also absent from this meeting.

Again, the editor states "it must be particularly noticed that Dr. Sager was on the ground, was cognizant of all the facts known to other members of the faculty, and yet made no protest, offered no suggestion, said not a word, until *long after* all was completely accomplished."

We beg to say that a greater amount of equivocation and misstatement was rarely compressed in a single sentence. Having been absent from this meeting, all the information which the writer possessed as to what had transpired was derived from the lips of Profs. Cheever, Frothingham and Maclean, who, with Profs. Dunster and Douglass, were present at the meeting, and "interposed no serious objections" to the "plan" of Regent Rynd. This meeting of the faculty was held on the 30th of April, and a meeting of the Board was called for the 11th of May.

In the hope that something might be done to arrest the attention of the Regents before further action was taken, the writer drew up at once a statement of his views touching the duties of the hour, respecting the disposition of the homœopathic question, and offered it for publication to one of the Detroit daily papers, which seems to pride itself upon its "Saxon love of fair play," but, without assignment of any reason, it was declined. Having been read to Profs. Cheever and Maclean, it was sent to the editors of the *Peninsular Journal*, about the middle of May, and published, but not without criticism, in the next number of the *Journal*, early in June.

The following extracts from the article will show the views then held by the writer, and we hazard nothing in saying that their adoption by the Board of Regents would have forestalled all serious objections from both parties chiefly interested:

"In organizing such a college, two courses are open to the Board of Regents: either to establish a complete school of homœopathy, with the usual number of six chairs, as in the colleges of Detroit and Chicago; or, by naming only two professors, make it practically connected with and dependent upon the present school of medicine in the University."

"By adopting a four months' course, which is the usual period in other homœopathic colleges, it would be entirely within the limits of practicability to appoint a full corps of six professors, and give to each member one thousand dollars (that being more than a full equivalent for a single course of lectures), without any disparagement to the new faculty. They would thus avoid the otherwise inevitable collisions, the strifes and distracting doubts among students and faculties, arising from opposite teachings, and relieve the faculty of the old school of the grave responsibility of employing their talents and experience as teachers, and yielding to their opponents the prestige of an old and well established school, and of thus directly promoting the interest of a school of dogmatism which, in common with nine-tenths of the profession the world over, they believe to be false in principle, and prejudicial to the best interests of humanity."

"If the attempt be made to carry out the other alternative, by the appointment of two professors of homœopathy, then will the Regents and faculty incur the responsibility of giving great dissatisfaction to the regular profession, which has hitherto given the department a true-hearted and generous support, of placing the present faculty in a false and dishonourable position, and of having grown weary in their *honorable* and *hitherto successful struggle* to maintain the purity and propriety of the department."

"To avoid these embarrassments and professional immoralities, let them have a college as an *independent school*, in the only sense in which the term can with truth and propriety be used. Let humiliating parasitism on the one hand, and impure hybridism on the other, be avoided, and the regular profession will withdraw all objections."

Having ascertained from the faculty and president, as well as from the action of the Regents, that no hope of change was to be entertained, we placed our resignation in the hands of the president soon after, setting forth therein a full statement of our reasons for the act, and which, though suppressed by the Board, was published in the July number of the DETROIT REVIEW. We deem this a sufficient answer to the reckless statements in the editorial of the *Peninsular Journal.*

But deeply conscious of his delinquency, and sensitive of the exposure of the complicity of the faculty in both word and deed, the editor makes desperate efforts to exculpate himself and associates. He repeats the assertion that "this state of things, with which our readers are already familiar, and for which the faculty were in no degree responsible," but, in regard to which, Dr. Rynd, in his letter published in the *Detroit Tribune*, of the 11th inst., states "that no serious objections were interposed" when his plan was laid before them for that purpose, and with the obvious intention of closing their lips from making any subsequent objection.

Writers on medical jurisprudence inform us that, in certain cases in which criminality is charged, the degree and kind of resistance may be such as to *invite* aggression. Are we to infer the objections interposed were of this character?

It was Sir Walter Scott, if we do not misremember, who replied to the question of some interviewer whether he believed in the complicity of Queen Mary in the murder of her husband, in shrewd Yankee style, "Did she not marry Bothwell?"

May not the profession express its sense of the position of the faculty by asking, have not the faculty carried out the homœopathic plan to which "they had interposed no serious objections?"

In view of the results, we can imagine that we distinctly heard the faculty say, at the close of this meeting, to Dr. Rynd and his coadjutors, "we cordially thank you for the courtesy of laying your plan before us for consideration, prior to its adoption, and will give you the most practical evidence of our approval by carrying out your scheme in full at our next session."

The allusion to the two hundred dollars' remuneration for the services of the Dean, coinciding, as it does, with more extended statements of a similar character before the class, reveals, we fear but too clearly, the *fundamental difficulty* with the faculty in seeing the moral delinquency involved in their position.

Reference is also made to the unanimity of opinion of the old school class in regard to the absurd teachings of homœopathy. Can the silent editor inform us whether it is not equally true of the homœopathic class in regard to the doctrines of the old school? Can he inform us how it could be otherwise, with the prohibition of *free discussion* by the Regents, like the sword of Damocles, suspended over the heads of the faculty, and all mingling of classes forbidden in the branches where the chief conflicts of doctrine occur?

One word in regard to the letter of Prof. Gross, which is now, after all its facts of importance to the profession had long been published, given to the readers of the *Peninsular Journal.* May we not fairly suspect that in the last sentence is to be found the true reason for its being published at last?

In commenting on the peculiar views of Prof. Octerlony, the editor remarks, "and it cannot be denied that they are more *in keeping* with the *general spirit of the age* than those to which Prof. Gross has given expression." In this depreciating allusion to the assumed antiquated opinions of Prof. Gross, current events would seem to justify the belief that the following sentiment in the letter of the venerable professor is especially referred to:

"*To preserve your honor, and to maintain the good opinion of your professional brethren, are two things above all other earthly consideration.*"

Wishing to avoid such invidious comparisons as the faculty in their "statement" have made in regard to Prof. Gross, "others standing *quite as high*, etc.," we may say that to the judgment of the profession may safely be left the proper estimate of the value and weight of these letters, and we are especially pleased to see them, though late, in the columns of the *Peninsular Journal.*

Respectfully,

A. SAGER.

In his valedictory address on retiring from his professorship, the eminent Rokitansky warns against the "readiness with which the ethics of the day excuses all manner of wrong doing, out of a misplaced sympathy, or a belief that nothing in itself is bad."

THE HOMEOPATHIC QUESTION—VIEWS OF AN ALUMNUS.

To the Editors of the Detroit Review of Medicine:

Gentlemen—Permit me, through your columns, to present a few thoughts for the consideration of physicians, and especially of such as are graduates from the medical department of our University, concerning the anomalous relation which that institution now sustains toward homeopathy.

This question, though fraught with issues of weighty import to the entire medical profession, yet possesses chief interest for and imposes prime responsibility on the medical alumni of the University.

This first act of invasion is a test case, and deserves to be considered not only on its own merits, but also as establishing, if successful, an authoritative precedent for like aggressions in the future; and if we quietly submit now, we shall thereby voluntarily surrender our defenses for all time to come, and not only permit our school of rational medicine to be converted into the nursery of all "pathies" and "isms," but also consent to the leveling of all boundaries between the true disciples of Esculapius and the devotees of every false system which shall hereafter gain entrance to the institution through the door which has now been opened.

Nor is this the most immediate evil which we have reason to apprehend; for, unless I greatly mistake the temper of the profession of the country, this act of official trafficing in professional honor will receive from the national association, at its next meeting, such a rebuke as will make us ashamed of our medical parentage, and hasten the degredation of our alma mater from her high position among the medical colleges of the land. Such, in logical sequence, must be the results of this attempted alliance of incongruous and immiscible elements, unless averted by timely and judicious interference on the part of the physicians of the State. Upon whom else can the inauguration of such action, having for its end the salvation of our medical school, so fittingly devolve as upon us, her children; and what do the exigencies of the case demand at our hands?

Obviously, the first duty for every man is to obtain a thorough knowledge of the merits of the case, that he may be enabled to make up an intelligent judgment, by which he will be willing to shape his course, "through evil and through good report."

Next, let every one give public expression to his sentiments through the medical journals, over his proper signature. Let no one feel that his help is not needed in this work, or that his influence is too slight to be of use; for, as

"Little drops of water, little grains of sand,
Make the mighty ocean and the beauteous land;"

so "a word fitly spoken" by each of us shall help to swell a current of professional sentiment which, haply, may prove strong enough to overcome this barrier in the course of our cherished institution.

Having thus united our forces, we may then memorialize the Legislature, praying that the University medical college be relieved from the burden of this incubus. Such request, shown to be based, not on sectarian bigotry, but on sound principles of equity, and signed by every loyal son of the college, should prevail to accomplish our object; failing this, it will, at least, constitute a guarantee of our fidelity to sound professional morals, and then, with the consciousness of having performed our whole duty, we may "shake off the dust from our feet" at the gates of our dishonored shrine, and be justified in transferring the support of our influence to some other fountain of knowledge as yet untainted.

In taking up a line of action in so important a matter, it is desirable to guard against misconception, by defining clearly the grounds on which we proceed, and I think we may fairly claim the following as a platform of simple right and justice:

1. We make no war on homeopathic practice, whether it be such indeed, or only in name.

2. We would deny to no one who is qualified to matriculate there the *full* advantages of the medical college.

3. We do not question the wisdom of the Legislature in providing for the establishment of a homeopathic department in the University, in obedience to the expressed will of the people.

4. Neither do we censure the Regents if they afford, in compliance with legislative enactments, to homeopaths, hydropaths or the believers in any other exclusive system of medicine, facilities under university patronage for the promulgation of their peculiar tenets. The issue which we join does not trench on these grounds.

On the other hand:

1. Our State medical college was founded, and has ever been sustained, on those liberal and progressive ideas in medicine which constitute at once the pride and the watchword of the true followers of Galen—their pride as giving ample space for the reception of all that is "true and of good report," from whatever source contributed; and their watchword to shut out every illiberal sect which claims to possess the one exclusive and all-sufficient law of cure. That she may still retain this tenure upon the respect of the wise and the good is surely but a reasonable prayer on the part of those who have her true interests at heart.

2. Believing that the fundamental doctrines of homeopathy are incompatible with the teachings alike of science and reason, and that any system of therapeutics and practice legitimately emanating from them can have nothing in common with a rational system, and can result in nothing but a worse than foolish tampering with human life, we do not believe that the same soil can be made to nourish growths so utterly heterogeneous, or the same tree to produce fruits so radically different.

3. We insist that the regents have not accomplished, in good faith, the end contemplated in the legislative act, the proper carrying out of which would not have involved the existing medical department, any more than it would have affected the department of law, or that of science, literature, and the arts. Let us compare the documents. The act of the Legislature is "short and sweet," as follows:

SECTION 1. The people of the State of Michigan enact: The Board of Regents of the University of Michigan are hereby authorized to establish a homeopathic college, as a branch or department of said University, which shall be located at the city of Ann Arbor.

SECTION 2. The treasurer of the State of Michigan shall, on the first day of January, 1876, pay out of the general fund to the order of the treasurer of the board of regents the sum of $6,000, and the same amount on the first day of January of each year thereafter, which moneys shall be used exclusively for the benefit of said department.

Approved, April 27, 1875.

The following are resolutions adopted by the regents at their meeting, May 11th, 1875:

WHEREAS, The Legislatue of the State of Michigan has appropriated $6,000 per annum for the purpose of establishing a homeopathic medical college as a branch or department of the University, the board of regents of said University do therefore

Resolve, 1. That a homeopathic medical college be established in the city of Ann Arbor.

2. That two professors be appointed who shall be designated, respectively, Professor of Materia Medica and Therapeutics, and Professor of the Theory and Practice of Medicine, in the homeopathic medical college of the University of Michigan.

4. Students entering the homeopathic medical college shall receive instruction in the now existing medical department in all branches not provided for by the chairs established above (including practical anatomy); they shall be entitled to all the privileges accorded to students in the medical department, and shall conform to all the requirements of said medical department.

7. Every professor in the medical department of the University, and also in the homeopathic medical college, shall upon the completion of the required course of study, and upon the student's giving the necessary evidence of professional scholarship, furnish such student with a certificate to that effect; the deans of the respective faculties shall report to the president, who shall present such reports to the board of regents.

9. From and after the present University commencement, degrees shall be conferred as provided for by the regents of the University, but all diplomas in every department of the University shall be signed only by the president and the secretary, and shall have the corporate seal of the university attached.

The regents have established a college of homeopathy; but how have they done it? If their words are to be literally construed, they have appointed two homeopathic professors to give instruction in materia medica and practice to homeopathic students, and designated them as professors *in* the homeopathic medical college, and not as *constituting* that college. They have also appointed six men to impart to homeopathic students instruction in the remain-

ing branches of study. If the two are homeopathic professors, are not the six their colleagues who make up the complement of the homeopathic faculty? If, by any act of legerdemain, the two homeopathic professors alone are to be considered as constituting the homeopathic department, then have the regents exceeded their authority, in requiring homeopathic students to receive instruction in the department of medicine and surgery, as truly as if they had exacted of them attendance on the law lectures. In either view the result to the college of medicine and surgery is the same, and we behold the spectacle of a school of liberal medicine, which, boasting a truly catholic spirit, recognizes no sect, compelled to lend its indorsement and support to the propagation of an exclusive system

Herein lies an invasion of sacred rights, and this it is which constitutes our cause of grievance; for, in the first place, injustice is done to the medical college, in forcing her to pursue a course which must jeopardize the recognition of other medical schools, and the support of the great body of physicians, and place an effective weapon in the hands of her enemies. In the second place, the personal liberties of the teachers are restricted, in requiring them to do violence to their honest convictions, and give the lie to the precepts and stultify the example of their former lives; and, finally, the graduates and students of the college are defrauded to the extent in which her reputation shall be injured, and the value of her diplomas depreciated.

Nothing could be more repugnant to my feelings than the task of censuring the conduct of my personal friends, and, were I prompted by no higher motive than a desire to pass strictures upon the medical faculty, my pen had not been called into use in connection with this subject. But, as officers of a State institution, impartial criticism of their official acts, by the friends and in the interests of that institution, is a duty exalted far above the plane of personal considerations.

If the faculty have not been instrumental in bringing about this state of things, they are certainly very unfortunate in the policy which they have chosen, since, under the most favorable construction possible, it proves them unequal to the emergency, and places them in the position of recreants to the trust reposed in them by the profession; for, conceding that the acceptance of this coalition and the resignation of their chairs were squarely forced upon them as alternatives, by the regents, even then a line of action was open to them which would have been consistent with their past record, and would have entitled them to "our warmest sympathies and kindest consideration," as bespoken for them by a writer in the *Peninsular Journal.* Had they, appealing to the State Medical Society, and the profession generally, for support, accepted the situation as a *temporary necessity,* and *under a manly protest,* without doubt, the society and professional sentiment, instead of demanding their resignation, would have cordially indorsed their course, and reïterated the advice of Dr. Sims, "Don't give up the ship."

Among the advantages which such a position would have possessed, the following, at least, are patent:

1. They would thus have given an earnest of their honesty and loyalty to principle, instead of occasioning, as they have done, a suspicion—and, in the minds of many, a firm conviction—that they were willing coadjutors in bringing about the new *regime*, and have bartered our birthright for a consideration.
2. In the event of future efforts to saddle upon the medical department chairs of other exclusive systems, they could consistently enter a protest; whereas, after their conduct in this affair, any protest from them against a similar infliction would be useless and ridiculous.
3. Such a policy would have forestalled, or, at least, delayed all adverse action toward the University by medical societies and other medical schools; their ban would be withheld to await the issue.
4. No cause of reproach would have been placed, as a weapon, in the hands of enemies and rivals.
5. There would have been no occasion for the pitiful attempt which they have made to vindicate themselves in a false position.
6. Without this attempted defense they would not have so effectually barred themselves from appealing to the Legislature or Regents for relief, if, in the course of time, they find their classes decimated, or any other calamity resulting from this alliance.
7. Any grounds upon which the present faculty could have honorably retained their positions, would have served as well for Dr. Sager; and thus his resignation, for which, *under existing circumstances*, he merits a tribute of grateful respect from all true physicians, would have been rendered unnecessary.

Gladly would I refrain from further allusion to the statement of the medical faculty, but for the fact that this document—more unique than ingenious, as a sophistical defense of an indefensible position—contains certain claims, the fallacy of which can not be too distinctly set forth. This must be my apology for uttering a substantial repetition of some things which have already been better said by Dr. Sager. The claims to which I refer are embraced in the following quotations from the statement:

"It (the homeopathic medical college) consists of two professors, one of 'Materia Medica and Therapeutics,' and one of the 'Theory and Practice of Medicine,' of course, according to the professed homeopathic system."

"This homeopathic college * * * is entirely distinct in its organization and name, from the department of medicine and surgery."

"The faculty of the college of medicine and surgery do not recommend for graduation, and have no responsibility whatever in sending forth, or licensing to practice, homeopathic students."

"But the students of the homeopathic college have the privilege of attending the instruction in the college of medicine and surgery on anatomy, chemistry, and all the branches excepting those on the 'Practice of Medicine' and 'Materia Medica,' and they are to be examined in the different departments of study by those who teach them, and are to have their knowledge, or want of knowledge, *in those departments* certified to."

From these assumed premises, the following conclusions are not only logical and plain, but they are *inevitable*, viz: The two homeopathic professors can graduate students as homeopathic physicians without any reference to the other faculty, since they alone CONSTITUTE the homeopathic college, and the professors in the regular department have "*no responsibility whatever*" for the graduation of their students. And again, the attendance of homeopathic students on lectures in the regular course being a *privilege*, is, of course, *optional*, and not essential to their graduation. The score or more of this class now in the institution ought to be informed of this fact, since, if any of them do not care particularly about the certificates of these professors, this knowledge will save them many hours of "confinement at hard labor." Will the regular faculty father this "logical consequence"—this "legitimate outcome" of their propositions?

But, according to the act of the Regents quoted above, the attendance of homeopathic students upon the lectures of certain professors in the college of medicine and surgery is both required and essential to their graduation, since the certificates of these gentlemen constitute six out of the eight credentials on the strength of which their diplomas are conferred. Again, the students in the college of medicine and surgery receive their degrees likewise on the evidence of eight certificates of proficiency, and six of these are from the same professors and for the same studies as in the case of homeopathic students; and moreover, *all* diplomas are to be signed only by the president and secretary.

With these manifest facts for premises, what escape is there from the conclusion that the professors in the regular medical department have a responsibility in sending forth homeopathic doctors from the University, which is in kind the same, and in amount three times as great, as that of the homeopathic professors; and the same exactly as they themselves have in creating regular doctors?

The putting forth of such absurdities as a defense—if indeed it be done in sober earnest, and not as a burlesque—implies the assumption of an amazing degree of credulity among those "judicious physicians" on whom this statement relies for indorsement; for, until the medical profession of the world can be convinced that the sum of six and two may be in one case eight, and in another case two, they must look upon the medical faculty of the University as possessing either a looseness of logic unworthy men of their attainments, or a desire to equivocate and cover the truth unworthy men of honor.

On the sixth page of the statement occur these words: "Any professional association, then, by regular physicians, with the professed adherents of this exclusive and radically opposing system (homeopathy) must be useless, or worse, leading to confusion and to the destruction of the confidence of patients. These principles must be seen to be logical and fundamental, and they are firmly held by the faculty."

With what a self-complacent sense of consistency will these teachers expatiate on the wonderful structure and functions of the human body, on the subtle workings of chemical and vital forces, on the noble achievements of surgery, on nature's inimitable methods in reproduction, and kindred subjects, to certain of their students, and furnish the preponderance of the evidence on which these students are recommended to the world as medical graduates of the Michigan University, while with the same breath they announce to that world that "any professional association" with these gentlemen is impossible, because they are the adherents of a "radically opposing system;" and, moreover, they are uneducated in the essential art of discriminating diseases; and their only available weapons in practice must be such infinitesimal subdivisions of the unit as mathematics cannot follow, and chemical reägents cannot detect!

Said I not truly that the medical department of the Michigan University sustains an anomalous relation to homeopathy—nay, is it not a *perilous* relation, and one which shall awaken in the hearts of many, who, loving her much, have rejoiced in her past achievements, and exulted in her glorious prospects for the future, the stern determination to rescue her, if possible, from the disaster which inevitably awaits her course, under her changed auspices.

Respectfully yours,

C. H. LEWIS.

JACKSON, December 21, 1875.

THE OTHER SIDE OF HOMEOPATHY IN THE UNIVERSITY, AS SEEN BY STUDENTS.

MR. EDITOR—It is a great year for "statements." The Brooklyn mania reached the University last summer, and has raged seriously in the medical department since. The first one from the faculty begot a continuation of sub-statements, until at last some of our classmates, who have not cut their *dentes sapientiæ*, have caught it too, and, evidently primiparæ, have, with some assistance, been safely delivered of their little "statement" in the December number of the *Peninsular Journal of Medicine.*

Without questioning the cause of the sudden advance in the value of students' opinions on professional topics—whether it be that sort of sympathetic effect by which some students sneeze when the faculty take snuff—we rejoice at and accept the fact, and, as we see that the *Journal* declined to publish the letter of an alumnus, whose opinions differed with it, thereby showing its partisan character, we ask the aid of your columns to help the faculty and the boys "see themselves as others see them."

The boys concede that the class is not unanimous on the subject, notwithstanding the meeting, resolutions, etc., managed by the favorites of the faculty, but they say they are "here for *instruction*," for "truth and science," and think it their duty to stay and help the faculty "combat homeopathy in the University." (So do we, for this winter, as we have paid our fees.) Though just what the "combat" is, and how we are to help it, they don't say. Thus far, the "combat" on the faculty side is a very quiet one. Even the doughty champion of regular medicine in former days, who is said to have led so many bloodless charges on homeopathic windmills, at a safe distance, roars as mildly as a sucking dove, now that there is a brace of real live homeopathic professors in the medical department; possibly, however, he is meant by the homeopathic professor who complained in the recent meeting here of the homeopathic State society, that, although two of the faculty had called on him, when "one cheek was smitten he had turned the other," though he thought "he would resent being kicked."

Now, if that is the kind of combat, when the next round comes off, "may we be there to see;" that would be a combat in which something might be decided, and is, perhaps, the "hand-to-hand contest" referred to in the faculty statement. We would risk something on the superior wind and weight of our champion, notwithstanding the agility and cheeks of the other. But we doubt if either of the combatants can ever be brought to time. And if our theory is all wrong, an interesting question remains—who did the cuffing, and who the calling, and who threatens to kick?

But do not our purblind classmates see that the homeopathic student decides the combat for himself when he matriculates as such; that he does not come here to compare rational medicine with homeopathy, having already made his choice, so that the combat, so far as he is concerned, ends in a defeat for "truth and science," by three-fourths of our faculty who teach it, giving him the essential testimonials which are required to get his homeopathic diploma, armed with which, he goes out to pervert our "truth and science" in the minds of the community where we may both locate; and to make his hybrid dogma more tolerable, refers, by authority of the Regents, in which the faculty acquiesce, and by the right of paying for it, to his pedigree—an infringement on the old homeopathic patent—showing him to be the professional offspring of a little homeopathic dam(n), and a paternity, the honor (?)

of which may be divided up among five or six regular (?) professors, who, alas, he will tell you, constitute part of your professional parentage too. (Just what the species of this joint progeny will be—whether a mongrel or a monstrosity—I fear would puzzle a professional Darwin to tell, though it may be interesting to know whether it can reproduce its kind, or is amenable to the "laws of teratology.") Yet, this creature—in part the creation of the faculty—with all the "truth and science" three-fourths of them can teach him, they say is not a fit associate for medical men *after* he graduates (?) though the faculty and ourselves associate with him daily now. As three-fourths of his teachers and nine-tenths of his classmates (?) are supposed to be orthodox, and as he was just as much a declared homeopath the first day our faculty lectured to him, will they tell us who contaminates him, and *when it begins?* Oh, oh!

In the same number of the *Journal* the serial is continued editorially (?) and in a flatulent production from the medical Regent. Really the case of the faculty seems to be more serious than we had supposed; but they should pray to be saved from their friends.

The Regent's gun must be a regular Gatling. It scatters well; though it is difficult, with a whole battery, to shoot so as to "hit the game, if a deer, and miss it, if a calf." It is not strange the editors should disclaim responsibility for his "views."

The Regent says they have always graduated homeopaths. We did not know it, and don't believe it now, though we fear an embryonic one must have slipped through the year he did. The Regent discusses the whole situation after the Sir Oracle style, but as he does not answer the points of Prof. Sager's reviews, it must be observed that his letter is striking chiefly because of what it omits. He is not so reckless as to deny the statements of "the venerable and distinguished critic" as to the responsibility of the faculty for graduating homeopaths, admits that a member of the faculty did go to Lansing with him; also that "no serious objection was interposed" by the faculty to the present plan when it was submitted to them by the medical committee.

Does the Regent think the graduates, who, because of the reputation the old college *has* borne, he says "are filling posts of honor and usefulness in public and private practice," favor his new departure now?

The Regent's answer to Dr. Topping's letter is novel, if not satisfactory, viz: That Dr. Gross is "not of Michigan!" We had supposed that the distinguished and eminent Prof. Gross *was* of Michigan as well as of Pennsylvania, and every State and country where scientific medicine and surgery is known, and that his opinions on any subject are worth hearing, else why have the faculty recommended his "System of Surgery" in their list of text and reference books? Will they expunge it, now it is discovered he is "not of Michigan?"

If the Regent is not more careful in attempting to use the boomerang, he will do himself or his admiring friends some more serious hurt. It requires skill to wield that weapon.

Should the great surgeon of cosmopolitan fame ever hear of the *not* great Regent, *only* "of Michigan," he will have nothing to fear.

But how about Prof. Octerlony, "not of Michigan," either, whom the editorial sub-statement quotes: Are Kentucky views better adapted to this region than those from Pennsylvania? Prof. Gross, however, was a Kentuckian, while the Regent was a Canadian before he was "of Michigan." Is "truth and science" a variable commodity, subject to climatic changes? But why do the faculty reject that part of Prof. O.'s letter that advises them not "give the matter *undue prominence* by discussing it in the newspapers," and "don't even talk about it." Surgical editorials should show more care in the use of double-edged instruments.

An important sentence in the journal editorial "statement" seems incomplete, perhaps though an error of the too 'intelligent compositor." Apparently to make it comprehensive as possible, it should read as follows, with the words in italics annexed:

"All, excepting Dr. Sager, who, two years before, had retired from active duty as teacher, and received a salary as Dean of only $200, chose to stand at their posts and teach truth, upholding common sense and reason, in opposition to absurdity and folly," *and draw their respective salaries of from* $1,800 *to* $2,500, this rendering being more consistent with the substance of statements made to the class, and the rumor that Prof. Sager was offered a much larger salary if he would not resign.

Fellow students, are not you and the faculty straining awfully at some little gnats, and taking down the biggest kind of camels without a wink? Could anything more "detrimental to the medical department be circulated among us" than these facts?

Finally, and seriously, we like the college, also the faculty, personally, and as teachers. We are sorry for them, but we think they have made a mistake. We appreciate the commendable efforts of the faculty to blind us to the ethics of the college by successful teaching. We appreciate the laboratory — its science at least (in view of recent developments, its truth needs analysis.) We like our classmates, and expect to stay the remainder of the term. But colleges are but entrances to the profession, and, in our study of medicine thus far, it has been impressed on us that much depends on making a good entrance. We do not wish to influence others, but, in view of the responsibility for graduating homeopathic students so plainly shown by Prof. Sager and others, we are constrained to say that, while we are not unmindful of the advantages offered in the medical department of the University, we fear the value of its "science" is marred by the character of its "truth;" and we are free to add that, for us, we want *some-*

thing more than "*instruction*," viz: a clear record—a faculty free from complicity in graduating students whom they declare are unworthy professional associates for themselves or us—a faculty that can sign our diplomas without violating the law of the authority by which they hold their chairs. Our alma mater must be like Cæsar's wife, above suspicion.

INDEPENDENT STUDENTS.

ANN ARBOR, Mich., December 23, 1875.

Condensations from our Exchanges.

PRACTICE OF MEDICINE AND THERAPEUTICS.

IDIOPATHIC ANÆMIA.—Dr. S. Wilks (*British Medical Journal*, Nov. 28, 1874) makes the following statement respecting this disease: Cases of fatal anæmia are occasionally met, in which no disease is found in any part of the body. These cases, after being in an almost bloodless condition for some months, die, and all the organs are found pale, some of them in a commencing state of fatty degeneration. There is also generally some exudation of serum into the serous cavities, as well as œdema of the lungs and other parts. The blood resembles pink water, containing no coagula in the vessels or heart, and the latter organ exhibits the form of fatty degeneration where the internal surface, especially the left ventricle, presents the peculiar mottling from change in the muscular fibre. The doctor suggests that one cause of this disease may be nervous shock. He quotes a case in which a girl who accidentally poisoned her father, was so overwhelmed with grief, that she took to her bed, became anæmic, and died. Two other cases gave a distinct history of moral shock. Another, a lad, after being attacked by a flock of sheep, sank into a state of extreme anæmia, from which he died.

ANÆMIA—PROGRESSIVE PERNICIOUS.—Dr Wm. Pepper (*American Journal Medical Sciences*, October, 1875) reports three cases as a contribution to our knowledge. From the facts presented by these and other cases previously described, he concludes:

1. Progressive pernicious anæmia is identical with the idiopathic anæmia of Addison, and is in no sense a new disease.
2. It is in reality the medullary form of so-called pseudo-leukæmia.
3. As the primary and essential lesions in this and analogous conditions (leukæmia and pseudo-leukæmia) appears to be an affection of the chief blood making tissues—spleen, lymphatic glands, marrow of the bones—causing defective elaboration of the blood, it seems proper to select some name that will indicate this fact, as ANÆMATOSIS.
4. The changes in the blood consist of great reduction in its mass, with extreme diminution in the proportion of red globules, without increase in the white corpuscles. There are probably also changes in the vital properties, both of the red and white corpuscles.
5. The other lesions, chiefly fatty degeneration of the heart and other organs, passive effusions and hemorrhages are secondary, and depend upon blood changes.
6. The symptoms are explicable in great part by the state of the blood, and the condition of the heart.
7. The disease, when once fully established, appears to be invariably fatal.

8. The remedies which afford most prospect of relief are cod-liver oil, arsenic and phosphorus.
9. Transfusion is only capable of doing temporary good.
10. The operation is not free from grave danger, owing to the feebleness of the heart, and the small amount of blood in the vessels, and in order to be safely employed, the amount of blood injected must be very small (f ℥ iii); it must be introduced very slowly, and the operation must be repeated at suitable intervals. It adds to the safety of the operation to inject the blood into a small artery instead of a vein.

Prof. H. Immermann (*Deutches Archiv. fur Klin. Med.—Med. Times*, August 22, 1874) details three carefully observed cases. We extract the following conclusions:

1. There is a peculiar form of a high grade of anæmia which is distinguished by a progressively pernicious course, and appears almost invariably to terminate fatally.
2. This affection is to be distinguished from chlorosis, leukæmia and other pathological processes as a peculiar form of disease, to denote which the name given by Biermer appears most convenient.
3. The etiology of this disease is obscure, since, although we know certain and abetting causes, we do not understand the essential one. The geographical distribution of the affection displays important variations.
4. The peculiar symptoms of the disease during life, as well as the anatomical changes observed subsequently, indicate it generally as the result of blood alterations, which the essential and primary disturbance of this affection establishes. The pathogenesis, however, of this excessive anæmia is not clear, since it may be due either to a diminished formation of the constituents of the blood, or their rapid destruction, one or the other of which would lead to a similar result.

GELSEMINUM SEMPERVIRENS AS A REMEDY IN COUGH.—Dr. J. R. Thomson (*British Medical Journal*, October 16, 1875) strongly recommends the use of the above drug for cough. He reports seven cases representing the various stages of phthisis in which the administration of this drug was attended with the happiest effects, as to a relief of the troublesome cough. He suggests that it might be used with advantage in the treatment of other varieties of cough.

SCROFULOUS PERSONS—METHOD BY WHICH THEY BECOME TUBERCULOUS.—Rindfleisch (*Ziemssen's Cyclopædia, Vol. V.*) illustrates his latest views as follows: If a scrofulous child is accidentally struck on the elbow the joint may become inflamed. Such an arthritis, accompanied with pain and congestion, may last several months, then take on a fungous character, and the cavity of the joint become filled with pus. The cells of this purulent secretion degenerate, and their detritus remains in contact with the diseased synovial membrane, is absorbed, and there results from its absorption local and general miliary tuberculosis. If in some other child from bad food a catarrhal inflammation of the small intestine is excited, the adenoid tissue of the mucous membrane becomes infiltrated with cells. These cells break down and are absorbed by the lymphatic vessels. Then there are produced miliary tubercles along the course of the lymphatics up to the mesenteric glands, and even beyond them, so that there is general tuberculosis. In the same way a scrofulous ophthalmia, an impetigo or a scrofulous ozæna may lead to tuberculosis of the cervical lymphatic glands, and then of the entire body. A catarrh of the larynx due to cold may give rise to a scrofulous infiltration of the vocal cords, or the folds of the glottis. The cells of this infiltration may break down, and their debris excite, on account of the unfavorable conditions for absorption, an eruption of miliary tubercles in the vocal cords, followed by tubercular infiltration.

Alcoholic Phthisis.—Dr. B. Richardson (*Medical Times and Gazette*, August 7, 1875) lays emphasis upon a form of consumption due to abuse of alcohol. Its subjects are in middle life—males of robust build and naturally healthy. They sleep, eat and drink pretty well; are active in body or mind, and enjoy life. They drink of any alcoholic drink they may meet, and with remarkable tolerance. As a rule, they can only work on a daily excess of alcohol, which excess must be increased if extra work is to be done. The symptoms of phthisis do not always begin when the patient is indulging in alcohol—he may have for some time become abstemious. The disease begins with pain in side, sharp in the onset, but later on continuous, and, as it subsides, there is difficult breathing. Then follows hæmoptysis, and the fatal end is near. Medicines affect the disease but little, the best diet fails, change of air accomplishes naught.

Anatomy of Tubercles.—Rindfleisch (*Ziemssen's Cyclopædia*, *Vol. V*, page 642) on this subject remarks that the time is past when one can be satisfied with proclaiming "miliary" tubercles as the specific product of tuberculosis, nor is it sufficient to define tubercles as a new growth made up of small cells. Beside the cellular granulation tubercle of inoculated guinea-pigs, there is a fibroid tubercle found most frequently in syphilitic patients, and a lymphadenoid tubercle of scrofulous patients. The tubercle cells of scrofulous persons are twice or thrice as large as a white blood corpuscle. At the same time they are more highly refractive, their nuclei are sharply defined and often shining. The nuclei may be segmented, but do not go on to form new cells; they simply produce multinuclear cells, sometimes giant cells. In this way is produced a peculiar large-celled germinal tissue—the specific product of scrofulous tuberculosis. This large-celled tissue usually forms the middle portion of the submiliary nodules, while at their periphery there prevails a small-celled inflammatory growth, which gradually becomes continuous with the normal connective tissue.

Bronchitis and Tuberculosis—Which is First?—Rindfleisch (*Ziemssen's Cyclopædia*, *Vol. V*) believes that bronchitis is first, and tuberculosis secondary. He believes that in the catarrhal secretions of a scrofulous person is contained the tubercular poison which becomes inoculated in the edges and corners of the narrowest portions of the bronchi. A similar secretion can inoculate the projecting edges of the larynx, the vocal cord, other points of the respiratory mucous membrane, and may even be swallowed and produce tubercles in the lymphatics of the intestines.

Tuberculosis and Scrofula—their relations to each other—Rindfleisch (*Ziemssen's Cylopædia*, *Vol. V*, 1875) says that tuberculosis in man depends in general on scrofula. One fundamental ingredient of scrofula seems to be a misproportion between the volume of the blood and the weight of the body. With this condition exists an abnormality of the entire vegetation which is especially evident in the course of any inflammatory processes which may arise. Scrofula may be the result of bad food, damp dwellings, of exhausting losses of blood and vitality, and is eminently hereditary. It is almost an exception to find a child of scrofulous parents without some taint of the disease. Hereditary scrofula usually makes itself manifest at two periods of life, in early youth before the seventh year, and again after puberty, between the ages of twenty and thirty years. Between the ages of ten and fifteen years there is comparative immunity from the disease. The best treatment for scrofula is to increase the volume of the blood; and the best treatment of a scrofulous infiltration is to produce a moderate local hyperæmia. The great danger of scrofula lies in the possibility of the supervention of the tuberculosis. Like certain animals—guinea pigs, rabbits, monkeys—scrofulous persons only need to have some local inflammation set up in order to beome tuberculous. The tuberculosis depends on the resorption of the individual's own inflammatory products. There is an eruption of numerous metastatic inflammatory foci—the miliary tubercles—while at the same time the patient's strength is rapidly consumed by the cachexia due to the same resorption. Let us assume that in the primary inflammatory focus a special tubercular poison is elaborated, which, besides its general effect on the inoculated person, exerts a direct inflammatory irritation on the inner surface of the lymphatics and blood vessels. Such an assumption would be supported by our experience of the formation and spread of miliary tubercles. The tubercles are, as a rule, most numerous in the neighborhood of the primary inflammation. Here they are situated in the connective tissue in the lymphatics, and form an important portion of the phthisical lesions of the different viscera. On account of the histological identity of the scrofulous and tubercular new growths, it is often impossible, in a given tubercular lesion, to determine how much is inflammatory and how much is tubercular.

THE DISEASE OF THE MYSTICS.—Dr. Charbonneau (*British Medical Journal*, July 22, 1874) recently presented an exhaustive memoir on the mystics, to the Paris Academy of Medicine. He demonstrates that two natural conditions are indispensable to reach the mystic state. The first is to profess a religion in which incarnation is one of the fundamental principles, so as to allow man to represent his divinity according to the form which accords with his desires, and the climate he inhabits. Secondly, he must submit himself to a debilitating regimen, which, while diminishing the activity of his physical functions, suppresses the inferior faculties of the soul to the advantage of imagination. Among the Hindoos and Christians the ecstatic undergoes a long preparation, consisting, for the corporal part, in proceedings to annihilate all the functions, and, for the soul, in such as suppress the function of relation and the exercise of the will, and in the concentration of all the strength in order to fix the attention on a single object. The doctor says that ecstacy has never been produced at once, and in a healthy subject. In his memoir the doctor shows the modifications of the organs in those afflected with this disease—modifications which may explain how life is sustained notwithstanding such prolonged abstinence.

INUNCTION.—Dr. W. R. Fisher (*Medical Record*, March 27, 1875), in an interesting discussion of inunction, reaches the following conclusions:

(1) The oils and fats are essential to growth and development.

(2) Inunction is a valuable method of introducing these nutritive materials into the body, to be used when the stomach will not tolerate the oils, or when we wish to produce special effects by this method of application.

(3) The vegetable oils are more suitable than the animal oils and fats for the purposes of inunction.

(4) The oils and fats are chiefly useful in those diseases and derangements of the system in which wasting enters as an important factor. Hence, we may expect that their employment by inunction will be specially beneficial in scrofula, constitutional syphilis and rickets, in convalescence from acute diseases, in nervous affections, and in many chronic diseases.

(5) Children are more suitable subjects for inunction than adults, partly because their susceptibility to external influences is much more acute than that which is exhibited at later periods of life, and partly because the applications are more easily made than in adults.

OBSTETRICS.

Case of Triplets Complicated with Double Uterus—Dr. A. G. Duncan (*British Medical Journal*, September, 1875) reports a case of the above nature. It was the fifth pregnancy, the four previous children being perfectly healthy and the deliveries normal. At this time two healthy children rapidly escaped from the uterus, the double placenta followed and the empty cavity contracted. In about two hours labor pains returned and a third but larger child was delivered with its placenta. The portions of the double uterus were now quite distinct. At a later period the uterus was carefully examined and the divided septum clearly seen and felt.

Triplet Births.—M. Depaul (*British Medical Journal*, August, 1875) reports a case of triplet births. The children were all girls and alive and well as the case was reported. The placenta formed one entire mass. The three cords were distinct—one inserted in the centre of the placenta, another on the edge of the organ, and the the third on the membrane. There were three amniotic pouches.

A case of triplets at abont the same time was reported at Paris. Mother, aged 35, was confined twice previously. Two boys were in one amniotic sac, and one girl in another. All were alive and well, being perfectly formed.

Chill after Delivery.—Dr. Pfaunkuch (*Medical and Surgical Reporter*, July 3, 1875) offers the following explanation of this familiar phenomenon. He says that the temperature of the fœtus is at least nine degrees higher than that of the mother. This centre of warmth does not increase the temperature of the woman. Hence, she must produce less warmth than when not pregnant. At the birth of the child this heat-producing centre is removed; and, hence, the woman gives off more heat than she produces. Hence the rigor. The intestines are very susceptible to heat and cold; and, as the uterus has sunk down, they are allowed to touch the thinned abdominal wall, and more heat is lost at the most sensitive place.

Asphyxia Treated by a Speedy Method.—Dr. H. L. Byrd (*Medical Record*, July 31, 1875) recommends the folllowing method for treating asphyxia in the new-born child: Bring the *ulnar* sides of the hands near together, with the palmar surfaces looking vertically, and place them beneath the back of the infant, so that the extended thumbs may aid as far as possible, in sustaining the vertex and inferior extremities; then keeping the *ulnar borders* so near together as to form a fulcrum, the radial borders or sides are simultaneously depressed to as great extent as practicable—say forty-five degrees—below the horizontal line, and then gradually pronated or elevated to as many degrees above that line, thus facilitating the escape of air drawn into the lungs during the downward movement of the head and chest. These alternate depressions of the two extremities, performed in a regular and gentle manner, and repeated at proper intervals, seldom fail in establishing respiration where it is possible of accomplishment.

Quinia as a Stimulant to the Pregnant Uterus.—Dr. Albert H. Smith (*London Obstetrical Journal*, June, 1875) gives the results of his personal observations concerning the actions of quinia on the pregnant uterus, as follows:

1. Quinia has no inherent property of stimulating the gravid uterus to contractions; being inert as to any effect upon the womb in a quiescent state, and having no decided action in accidental labors at any period of gestatation.
2. To its property as a general stimulant and promoter of vital energy and functional activity, and to that alone, is due its influence upon the

uterus in normal parturition. It produces no action peculiar to itself, but merely increases the power of the uterus to expel its contents by its own natural method, and converts what is a defective, or even pathological action, into a simple physiological process.

3. By availing ourselves of this power, we may, by administering full doses of sulphate of quinia at the onset of labor, favor the rapid and safe termination of what might otherwise be a tedious and exhausting work. The dose of quinia thus given is fifteen grains.

CIRCULATION OF PREGNANT WOMEN—SOME PHYSIOLOGICO-PATHOLOGICAL PHENOMENA.—Dr. Robert Barnes (*British Medical Journal*, Nov. 13, 1875), in a article upon this subject, makes the following propositions:

1. There exists in pregnancy a peculiar state of the blood, an increased arterial tension, and a disposition to phlebectasis general, or affecting particular vascular regions or systems, which may, under certain circumstances, lead to hemorrhagic effusions.
2. These hemorrhagic effusions may be salutary or conservative. Hemorrhages from the mucous membranes, by relieving excess of tension, may avert internal hemorrhages or abortions, or that oppression of the kidneys which results in albuminuria and eclampsia.
3. Hemorrhages from the uterus, inducing abortion, may, in the same way, avert more serious mischief, especially albuminuria and eclampsia.
4. But these hemorrhages, although we may recognize in them a conservative purpose, easily exceed physiological or useful limits, and may themselves induce danger by anemia.
5. Hemorrhages, from whatever part, occurring in women within the period of sexual life, should suggest the probability of pregnancy or menstrual disorder.
6. The hemorrhages described should be taken as indications to reduce vascular tension. This may be done in some cases by bleeding, general or local, by purgatives, by salines, by abstinence from stimulants, by regulation of diet, by digitalis, hydrocyanic acid, and other means.
7. Bleeding from the arm may avert abortion, not only by reducing arterial tension, but also by a derivative action determining the direction of the blood from the pelvis to the opening of the vein. This derivative action of bleeding was much relied upon in a variety of cases by Lisfranc.
8. In some cases when the hemorrhages are frequent and great, and induce serious symptoms, the induction of labor is indicated.

VOMITING OF PREGNANCY TREATED BY DILUTE PHOSPHORIC ACID.—Dr. T. Fairbank (*British Medical Journal*, Nov. 20, 1875) finds the above remedy of great service in the treatment of the nausea of early pregnancy. The dose is from thirty to sixty minims in wine glass of water two to four times a day, as needed. It is specially valuable in cases which the nausea becomes extreme at the sight of food.

PHYSIOLOGY.

MILK DIET—IS IT INJURIOUS IN DIABETES?—Dr. Donkin (*British Medical Journal*, October 2, 1875) contends that milk sugar differs so essentially from cane sugar, grape sugar, and pure diabetic sugar, that it is not converted into it, and does not appear again in that form in the urine. Belonging to a different class of sugars, milk sugar does not undergo alcoholic fermentation in contact with yeast, and in addition, it does not precipitate the oxide of copper when treated with the reduction test. On the other hand, it is subject to lactic fermentation by the action of ferments. On account of these intrinsic differences, lactose, as an ingredient of milk, cannot undergo the same metamorphic changes as glucose in the processes of digestion and assimilation in health (nor be converted into it in diabetes), its conversion into lactic acid being direct and immediate, not by intermediate changes through which the latter pass into this substance. For this reason, which is perfectly intelligible, milk sugar, unlike vegetable glucose, is assimilated, and the reverse of injurious in diabetes. To give skim-milk a fair trial, no other food must be allowed to mix with it in the stomach. If it cannot be made the exclusive diet, care must be taken that the milk be entirely absorbed ere other food be swallowed.

ACTION OF ALKALIES UPON THE COMPOSITION OF THE BLOOD.—Pupier (*Comptes Rendus—Edinburgh Medical Journal*, October, 1875) gives the results of an experimental investigation of this subject.

1. The administration of alkalies in a state of health tends to augment the number of red corpuscles, to increase the temperature and weight of the subject, and to favor trophic phenomena.

2. In a diseased condition of the tissues of a considerable extent, they produce anæmia by aiding in morbid changes.

3. On the one hand they increase physiological function, and on the other, they stimulate pathological processes. A case is cited in which a man for twenty-nine years took a daily dose of three hundred grains of anhydrous bi-carbonate of soda, without anæmia or loss of health.

DRINKING WATER—INFLUENCE OF ITS INORGANIC CONSTITUENTS UPON THE CONSTITUTIONS OF CONSUMERS.—Dr. W. J. Cooper (*Sanitary Record*, September, 11, 1875) forcibly urges the importance of the above subject. M. Papillon, by experiments, has shown that mineral matter, in dilute solution as well as in the food, effects the composition of the bones. Hence, the effect of altering the composition of the water supply may involve questions of vast importance to the organic structure of the body. If the water be deficient in lime, strontia or magnesia, the bones would be imperfectly supplied with mineral matter. By varying the water supply, it might be possible to alter the physical organization of an entire population. The following are illustrations of the serious consequences from incautious use of deep waters: At Hendon, England, some time since, an artesian well was bored to supply water to a stock of valuable horses. The water was sparkling, pleasant to the taste, and quite free from organic impurity. The foals which drank the water soon died, and the whole stock became seriously affected with diarrhœa. On discontinuance of the water the disease was arrested. The water contained considerable sulphate of soda and magnesia. At Rugby, the water from an artesian well was hailed with satisfaction at its brightness. The diarrhœa caused by its use was so severe that the supply had to be discontinued—too much epsom salt.

COMPRESSED AIR—ITS ACTION.—M. Bert (*British Medical Journal*, August 14, 1875), by a long series of experiments, has shown that air compressed to a certain degree kills living beings in a very short time. This is due to the tension of the compressed oxygen. On submitting fresh meat, beaten eggs, urine, wine and milk to a strong tension of oxygen, he kept these substances in a perfect state of preservation. From these facts he concludes: (*a*) Oxygen of high tension effectually stops fermentatation, so that the the process is not resumed on the restoration of the normal pressure; it kills all fermenting agents. (*b*) Its action on diastasic ferments is unappreciable; notwithstanding the presence of oxygen, they continue to be active for an unlimited period.

SURGERY.

Chloroform Narcosis—Its Prevention—Dr. Jacob Fleiberg (*Berlin Clinical Weekly—American Practitioner*, Nov., 1875) recommends the dislocation of the inferior maxilliary bone forwards whenever any symptoms of asphyxia make their appearance. As soon as dislocation is effected, the patient takes a long breath, and respiration proceeds without any further difficulty, as long as the parts remain in the same condition. The doctor says that he has employed this procedure more than a thousand times with perfect success. Esmack has, with similar results, used the same method for nine years.

The Pupil—Its Relationship to the Degree of Anæsthesia.—Dr. Budin (*Glasgow Medical Journal*, July 1875), from a series of observations upon the relation of the pupil to the degree of chloroform anæsthesia, deduces the following conclusions:

1. If the anæsthesia is total the pupil is contracted, and remains in that state, notwithstanding the application of the most powferful excitants to the surface of the body or directly to the nerves.
2. If the anæsthesia is not complete, we see the pupils dilate under the influence of the various excitants to which we submit the patient, who is then disturbed, and often groans or cries.
3. Finally, if vomiting supervenes, we see the pupil dilate under the influence of the efforts which characterize this phenomenon; at the same time sensibility returns more or less completely.

Chloroform in the Surgery of Infants.—Dr. Bergeron, of Paris (*London Obstetrical Journal*, June, 1875), from his personal experience upon this subject, concludes that—

1. Chloroform in the the infant is endowed with an almost absolute harmlessness.
2. The child, not having come to the age of reason, nor feeling any moral emotion, suffers from no apprehension of the dangers to which it may be exposed, nor experiences the apnœa which produces so much terror, and is, the author imagines, a most important cause of death supervening suddenly during the administration of chloroform.
3. Chloroform may be administered to the infant from the first day of its birth.

Larynx—Total Excision.—This operation was first performed by Billroth, of Vienna, in 1873, then by Heine, of Prague, then by Dr. Moriz Schmidt, of Frankfort on the Maine, and lastly by Von Langenbeck, July 21, 1875.

Enormous Abscess of Kidney Cured by Incision and Drainage.—Dr. J. F. Heustis (*American Jour. Med. Sciences*, October, 1875) reports the following: A young man with abscess of the kidney suffered so greatly from the discharge of the purulent matter by the urethra, that the abscess was freely opened in the back. About three pints of fetid pus was at once discharged. A drainage tube being inserted, the abscess was washed out daily. Soon he began to gain in general strength, the cavity to diminish in size, and the discharge to grow less. After about four months he completely recovered, excepting a small opening with slight discharge.

Fluctuation—Its Value as a Sign.—Dr. T. H. Bartlett (*Brit. Med. Chirurg.—American Jour. Med. Science*, October, 1875) points out the sources of frequent error in detecting the presence of fluid by fluctuation. False fluctuation is generally due to the combination of two causes of error, one being muscular or glandular elasticity, and the other being muscular or glandular displacement. Any one who tries the experiment will be surprised at the sensation of fluctuation which can be obtained by pressing alternately, as in endeavoring to find the sense of elasticity or fluctuation of an abcess, a muscle across the direction of its fibres, say the biceps, or by similarly manipulating across the direction of the ducts a firm and fairly large female mammal. Either the displacement of the gland or muscle is liable to mislead, but when a combination of elasticity and displacement is obtained, the apparent fluctuation is so like the real, as to be almost or quite undistinguishable from it. How, then, can we be certain that the sense of fluctuation in a tumor over a gland or muscle is due to fluid? By practicing the maneuvre of palpation, not only across the line of muscular fibres or of the gland ducts, but also in a direction at right-angles to this. if the fluctuation be fluid, it will be equally felt in all directions; if it be due to muscular or glandular elasticity or displacement, or both combined, it will be felt only in one direction, viz., across the muscular fibres or the gland ducts.

Chemistry and Pharmacy.

GALLIUM—A NEW METAL.—The year that is just concluded has been signalized by the discovery of a new element. We are indebted for the knowledge we at present possess of this rare metal to the spectroscope—that latest and most wonderful instrument for the prosecution of physical research, which has already added four metals to the list of known elements. The discovery was made on the 27th of August, by M. Lecoq, an amateur chemist of Bois Baudran, Cognac, and has been named by him gallium, in honor of France, the ancient Gallia. It has not yet been obtained in the metallic form, but it appears to be allied to cadmium and zinc, with which it was found associated in a blende from Pietrafita, Spain.

THE ACTIVE PRINCIPLE OF ALOES.—Dr. Wm. Craig, in an exhaustive paper on this subject, sums up (*Pharm. Jour. and Trans.*) his conclusions as follows:

1. Aloin may, by exposure to the air, undergo considerable chemical change without losing its physiological action as an active aperient.

2. The resin of aloes, when thoroughly exhausted of aloin, possesses no purgative properties, and therefore cannot be the active principle of aloes.

3. The resin of aloes is not the cause of the griping which sometimes follows the administration of the drug.

4. Aloin is an active aperient, and in all likelihood *the* active principle of aloes.

IODOFORM CRAYONS.—A drachm and a half of iodoform, finely powdered, mixed with seven and a half grains of powdered gum acacia, is formed with a little mucilage into a mass, which is to be rolled out and divided into ten pencils, about an inch in length. These are allowed to dry in the air for twenty-four hours, after which they must be kept in a dark and air-tight bottle, or they will become disintegrated.—*Can. Phar. Journal.*

DETECTION OF POTASSIUM CYANIDE IN PRESENCE OF NON-POISONOUS DOUBLE CYANIDES.—E. Jacquemin (*Jour. de Pharm. et de Chemie*) recommends to boil the suspected solution with sodium hypo-sulphite, by which the cyanide is converted into sulpho-cyanide, which may be detected by a ferric salt. The reaction is as follows: $KCN + Na_2S_2O_3 = KCNS + Na_2SO_3$. Another method consists in heating the solution to 130° F. and testing with picric acid for the isopurpuric coloration.

THE COMBUSTIBILITY OF IRON.—A pretty experiment, demonstrating the ready combustibility of metallic iron in atmospheric air, has been devised by a Berlin savant. He simply sprinkles fine iron filings upon the poles of a powerful magnet. The particles of metal arrange themselves in accordance with the lines of magnetic force, forming delicate filaments, which are held apart by mutual repulsion. The metallic sponge thus formed may be kindled in the flame of an ordinary candle, when it will burn with the brilliant scintillations which characterize the combustion of iron. If the experimenter move the magnet to and-fro while burning, a magnificent rain of fire is produced.

A CURIOUS AND PRETTY CHEMICAL EXPERIMENT.—Put into a large glass jar a solution of sodium silicate (1 : 15) and drop in crystals of various metallic salts, *e. g.*, sulphates of iron and copper. The chemical reaction which ensues results in the formation of a miniature forest, or a growth resembling sea weeds. The semblance of vegetable growth is so striking that it is difficult to believe that the forces at work are simply those which belong to inert dead matter. One cannot help asking the question whether, after all, the difference is an absolute one between the so-called chemical and the vital formative processes.

EXPERIMENT IN INSTANTANEOUS CRYSTALLIZATION.—Dissolve one hundred and fifty parts by weight of sodium hyposulphite in fifteen parts boiling water, and gently pour into a tall test glass, so as to half fill it, keeping the solution warm by placing the glass in hot water. Dissolve one hundred parts of sodium acetate in fifteen parts hot water, and carefully pour into the same glass so as to overlie the former solution. When cool there will be two supersaturated solutions. If a crystal of sodium hyposulphite be attached to a thread and let down through the acetate solution, it will produce instantaneous crystallization in the lower stratum, without affecting the upper. The upper layer may then be made to crystallize in a similar manner by introducing into it a crystal of sodium acetate. The experiment is rendered the more striking by the contrast in the form and appearance of the two kinds of crystals.—*La Nature.*

CHLOROFORM.—According to C. Remys (*Am. Jour. Pharm.*, from *Arch. Pharm.*), 1. Pure chloroform has a specific gravity of 1.500 at 15° C., and boils at 60.5°. If the specific gravity be 1.492, the boiling point is 59.75 to 60° C., and the sample contains about ½ per cent alcohol.

(2) A sample of higher boiling point than 60.5° C. contains amyl and butyl compounds; the specific gravity of such a sample may rise to 1.502.

(3) A small quantity of alcohol is the best preservative of chloroform against decomposition.

(4) Decomposition of chloroform takes place even in the dark. The smallest trace of moisture or air sets up change, the chief products being chlorine, hydrochloric acid and phosgene gas.

(5) All commercial chloroform contains fusel oil.

DETECTION OF FUSEL OIL IN ALCOHOL.—A drachm of the alcohol to be tested is mixed with six or seven times its volume of water, and then agitated with about twenty drops of chloroform, which, after spontaneous evaporation, leaves the fusel oil recognizable by its odor, and by that of its ether when treated with a little sulphuric acid and potassium acetate. By this means one-twentieth per cent of fusel oil may be detected.—*Gleanings in Am. Jour. Pharmacy.*

MILK FOR BABES. From the *Boston Journal of Chemistry* we clip the following: According to P. Ebell, when benzoyl-naphtylamide is treated with nitric acid, two isomeric mononitrobenzoylnaphtylamides are formed. By the action of hydrogen upon these bodies, different products are obtained. One yields monoamoidbenzonaphtylamide, the other anhydrobenzodiamidonaphtalene. F. Meincke finds that when bromine is allowed to act on benzanilide, monobrombenzanilide is produced; and that the latter, when treated with fuming nitric acid, yields monobrommonitrobenzanilide, and also bromdinitrobenzanilide. [There certainly is an air of *vraisemblance* about these statements, and we commend them to the serious consideration of our readers.—ED.]

Editorial.

Seeking to be the medium through which the members of the medical profession may communicate with each other on *medical subjects*, we solicit Original Articles, Reports of Medical Societies, Observations, Correspondence, News, etc., of general interest. Articles should be practical and carefully prepared.

Secretaries of Medical Societies are respectfully requested to send us Reports for publication.

Each of our professional readers is personally invited to forward us Original Articles, Reports of Cases, Medical News, etc.

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RELATIONS OF THE MEDICAL PROFESSION TO THE COPARTNERSHIP OF REGULAR AND HOMEOPATHIC TEACHING IN MICHIGAN UNIVERSITY – VOICE OF THE MEDICAL PRESS.

LAST month we gave a brief summary of the opinions expressed by the medical press concerning the position assumed by the faculty of the medical school at Ann Arbor. Since then to date of writing several additional journals have spoken. For many months the facts respecting this position have gradually been coming to light. Cautious and conservative respecting its judgments, the profession has carefully sought for all possible evidence respecting the matter before making a diagnosis or recommending treatment. Many of our readers are anxious to know exactly what the profession think at the present stage of the examination. In the following compilation, as far as possible, we have given the writers' own words. It must be remembered that each writer has read the faculty's own statement—the result of many months of careful deliberation, as they inform us.

The *Southern Medical Record*, September, 1875, says:

"If colleges, or the theories that they teach and represent, can be allowed to form such copartnership, I see no good reason why their graduates should not be allowed the same privilege. If a State medical society can endorse such a business and professional connection, it would certainly be inconsistent in that society to refuse admittance to homeopathic physicians. If the regular colleges can recognize such a mongrel enterprise, certainly their graduates, wherever they may be, should be allowed to mix and mingle, consult, trade and traffic in everything, and with everybody, regardless of creed, system, sex, or color. The code of ethics should be interpreted the same in every State, and enforced to the letter, or it should be abolished. To scheme and plan with a purpose to dodge issues for the benefit of personal friends, or to shirk responsibility, always seriously damages the individuals concerned, and, sooner or later, destroys the usefulness of the organizations concerned."

Nashville Medical Journal, October, 1875, says:

"It has ever been our position that medical men should regulate medical teaching, and if they deviate from this maxim, they must expect to be subjected to the inconveniences of interference on the part of those to whom they have delegated their rights. With quackery the medical man can hold no fellowship and maintain the dignity of his calling. Come out from among them. Touch not the unclean thing. If the State, through its representatives, supports and advances it, the duty of every medical man is clear—there is no way open but the severance of those relations which force upon them such unworthy association."

Speaking of the "faculty statement," the above writer says:

"The matter cannot be whitewashed, though this pamphlet is about as sharp a case of special pleading as we have ever known."

Richmond and Louisville Medical Journal, October, 1875, says:

"But when State legislators control such universities, what are the unhappy, ruinous results? Look at the University of Michigan at the present time; with all the devices used for glossing over the facts, it stands to-day an exponent in part of homeopathy, and those who are taught by its faculty are to be homeopaths. In another year the legislature will give hydropaths equal privileges; then the electrical; then the botanical gentlemen, and, lastly, the red pepper people. * * Medical men should control medical institutions."

The *Buffalo Medical Journal*, October, 1875, after quoting the main facts involved in the question at issue, and Prof. Palmer's statements at American Medical Association, many years ago, says:

"That the 'faculty statement' does not throw any light upon the subject, but takes a stand decidedly in opposition to that assumed by Prof. Palmer, in his remarks at American Medical Association. If homeopathy is to be taught at the Michigan University, let it be taught by a complete faculty, which shall in nowise be composed in part of the members of the present faculty of medicine and surgery. Until such is the case, the profession must look with a degree of suspicion upon the present state of affairs, and students attending the medical department of Michigan University will be regarded with a degree of suspicion by their professional associates."

The *St. Louis Medical and Surgical Journal*, October, 1875, thinks that the muddle at the medical school of Michigan University

"Illustrates the folly of a State attempting to teach medicine. We may need *one* Michigan University as a warning to other States to keep clear of the folly of a State medical school. We do not think it quite the thing for three-fourths of the teachers of medicine in the University to engage in the medical education of men who propose to prostitute it to charlatans. * * As educated mountebanks are more dangerous than ignorant ones, honest men cannot consistently assist in their education."

The *Western Lancet*, San Francisco, Cal., October, 1875, after stating the principle facts of the case, says:

"We are, however, pleased to see that the oldest member of the faculty, and the late Dean, had the self-respect, to say nothing of his regard and devotion to the science of medicine, to resign at once. Honor to Dr. Sager, who, by this act, has secured the esteem of every true physician and votary of the science of medicine in this country and abroad."

The *Boston Medical Journal*, September 30, says that a study of "the faculty statement does not in any way modify the opinions we have expressed" (as quoted in October, 1875, number of REVIEW). The "whole affair is an evasion."

The *Chicago Journal of Nervous and Mental Diseases*, October, 1875, says that

"The faculty, in retaining their positions, are forced into a *quasi* recognition of homeopathy. A certain result of the affair will be, that the professors of the regular medical faculty, with the exception of the professor of the practice of medicine, will regularly appear as professors in the homeopathic medical department of the University, not, perhaps, in the regular University catalogue, but in the hômeopathic journals and circulars scattered throughout the country."

The *Leavenworth Medical Herald*, October, 1875, after a plain statement of the facts, says that,

"While humanity may gain, the medical department of the University must suffer. This homeopathic pitch will so besmirch it that, from this time forth, a diploma therefrom will be regarded with suspicion, and the holder thereof will fail of that cordial reception and professional support so necessary to success. The remaining members of the faculty, who have clung so tenaciously to their positions, will have the questionable satisfaction of lecturing to empty benches. The silent influence of the profession will withhold from that college their former support, and the spider can hereafter weave his web in the dangling skeletons with no one to 'molest or make afraid.' It will be the manifest duty of the next legislature to provide for the inscription, in large capitals, of "Ichabod" over the entrance to the medical halls of Michigan University."

The *Medical Times* (Philadelphia) of October 2, endorsed the action of the faculty, its endorsements resting on the statements made by the Dean, Prof. Palmer, on behalf of the faculty. The facts presented by Prof. A. Sager, in his review of said statement, were such as to so alter the aspect of the case as to lead the editor of the same journal, in the issue for October 30, to write as follows:

"If Dr. Sager's statements of facts be correct, evidently the faculty of the Michigan University did not have an accomplished fact to deal with, but are responsible to their professional brethren for having aided and abetted the introduction of homeopathy into the University. * * * It seems plainly to be the duty of every medical preceptor to urge the student to have no connection with a college so tainted."

The *New York Medical Journal*, November, 1875, says:

"We have read with much regret the lengthy appeal for sympathy put forth by some of the medical faculty of this University in the vain hope of justifying themselves in the endeavor to serve two masters. They have but one course before them that will be endorsed and applauded by the entire profession."

The *Pharmaceutical Gazette* says:

"The medical faculty of the University of Michigan has recently been increased by the addition of two new professors, who are to teach the distinctive principles of homeopathy. This makes a most wonderful combination—a kind of 'young men's Christian association' of a college, and has created quite a stir in medical circles."

The *Chicago Medical Journal and Examiner*, December, 1875, speaking of the homeopathic college of the University of Michigan, says:

"The students of this young college who carry away the diploma of the University may justly congratulate themselves on having had for their instructors such illustrious teachers as the venerable Professors Ford and Douglass, Professors Maclean and Dunster. Whether these professors may congratulate themselves on being teachers in the new college is another matter."

The *Atlanta Medical and Surgical Journal*, December, 1875, says:

"The faculty of Michigan University certainly occupy at present a very unenviable position before the profession. Let them put it as they may, if Prof. Sager's statement is correct, they stand convicted of not only not objecting to the union or copartnership arrangement, but inviting it."

After quoting Prof. Sager's words, it says:

"In reading these extracts from this damaging pamphlet of Dr. Sager, we have been irresistibly impressed with the idea that the change in the bill and the union of the two schools was the result of the manifestation of members of the faculty of the University. Until this statement of Dr. S. is successfully disproved, the faculty stand convicted of tampering with the unclean thing."

The *Richmond and Louisville Medical Journal*, November, 1875, designates the medical department of Michigan University as "the foster mother of homeopathy."

Our space forbids more than a few extracts from this outspoken editorial article.

"The faculty of Michigan University, after nobly resisting the encroachments of the enemy, have at last ingloriously succumbed. They are to-day in the grasp of the monster, which is already speedily destroying their past record, their present standing and their future hopes. * * The faculty of a regular school of medicine create practitioners whose practice they honestly believe to be a fraud, a danger and a sham. * * The faculty agreed to that legislation of the Board of Regents which, as they urge now, so agitates and distresses them. This is very bad. It needs no comment. The faculty urge that they do not sign the diplomas of the graduates in homeopathy. True, but they authorize and sanction the signatures of others. This is a melancholy quibble. It is very unworthy of men claiming to be upright.

"Again, the faculty claim that they can now (before homeopathic students) expose the errors of homeopathy; but the schedule of lectures is so arranged that the lectures on materia medica and on practice are delivered in the old college and in the homeopathic department at the same hour. Exposure and conversion are therefore impracticable; but, were it otherwise, what would be the picture? Pupils repudiating the doctrines of their own teachers, and teachers appealing for a hearing to their own pupils. 'What a fall was there, my countrymen!'

"Were a witness to plead the right to sustain and sanction a fraud to save the life of a friend, the plea would meet with abhorrence. Yet, this is the plea of a faculty, claiming that it is best to virtually saction homeopathy in the University, to save the medical school from the ruin entailed by their withdrawal. Such logic is worse than such action. The true course is too clear to require description. The legislature has hoisted the flag of homeopathy over the University, and will defend and keep it there. Those who repudiate this flag and all it represents, dishonor themselves, their principles and friends by doing service where it flies. Honorable surrender before dishonorable service."

On the other hand, only one journal outside of Michigan—the *Medical Record*—endorses the faculty's position.

Evidently, so far as it has thus spoken, the profession does not endorse the "new departure" in medical teaching inaugurated by the faculty and Regents at Michigan University.

Plainly the profession requires of its schools an unswerving devotion to its interests. Service to the State or to quackery is doubtless commendable in its proper place, but the profession is not content to have its schools forsake its interests to do the bidding of politicians and homeopaths.

From all this, the faint-hearted may take courage. Professional immorality and infidelity is signally rebuked.

AMERICAN CENTENNIAL CELEBRATION—INTERNATIONAL MEDICAL CONGRESS.

The medical societies of Philadelphia, animated by a just spirit of patriotism, and an earnest desire to unite with their fellow citizens in celebrating the centennial birthday of American independence, have taken the initiatory steps for the formation of an International Medical Congress, by the appointment of delegates from their respective bodies, who were empowered to organize and perfect a scheme for the above purpose. In accordance with the authority thus given, the delegation has organized the Centennial Medical Commission, with the following officers:

President, Samuel D. Gross, M. D., LL. D., D. C. L. Oxon.; vice-presidents, W. S. W. Ruschenberger, M. D., U. S. N., Alfred Stille, M. D.; recording secretary, William B. Atkinson, M. D.; American corresponding secretaries, Daniel G. Brinton, M. D., William Goodell, M. D.; foreign corresponding secretaries, Richard J. Dunglison, M. D., R. M. Bertolet, M. D.; treasurer, Caspar Wister, M. D.

Arrangements have been made for the holding of the congress in the city of Philadelphia, to begin on the 4th and terminate on the 9th of September, 1876. The commission propose the following general plan for the organization and business of the congress:

1. The congress shall consist of delegates, American and foreign, the former representing the American Medical Association and the State and territorial medical societies of the Union; the latter the principal medical societies of other countries.

2. The officers shall consist of a president, ten vice-presidents, four secretaries, a treasurer, and a committee of publication, to be elected by the congress at its first session, on the report of a committee of nomination.

3. The morning sessions of the congress shall be devoted to general business and the reading of discourses; the afternoon to the meetings of the sections, of which there shall be nine, viz: 1. Medicine, including pathology, pathological anatomy and therapeutics; 2. Biology, including anatomy, histology, physiology and microscopy; 3. Surgery; 4. Dermatology and syphilology; 5. Obstetrics and diseases of women and children; 6. Chemistry, toxicology and medical jurisprudence; 7. Sanitary science, including hygiene and medical statistics; 8. Ophthalmology and otology; 9. Mental diseases.

4. The language of the congress shall be the English, but not to the exclusion of any other language in which members may be able to express themselves more fluently. Gentlemen intending to make communications upon scientific subjects will please notify the commission at the earliest practicable date, in order that places may be assigned them on the programme.

In order to impart to the congress a thoroughly international character, invitations to send delegates will be extended to all the prominent medical societies in Europe, Mexico, the British Dominions, Central and South America, the Sandwich Islands, the East and West Indies, Australia, China and Japan. Invitations will also be tendered to medical gentlemen of high scientific position; and distinguished visitors may be admitted to membership by a vote of the congress.

Among the advantages arising from such a convocation as this, not the least important will be the opportunity afforded its members for the interchange of friendly greetings, the formation of new acquaintances, and the renewal and cementing of old friendships.

The Centennial Medical Commission tender in advance to their brethren in all parts of the world a cordial welcome and a generous hospitality during their sojourn in the "Centennial city."

The congress will be formally opened at noon on Monday, the 4th day of September, 1876. The registration book will be opened daily from Thursday, August 31, from 12 to 3 P. M., in the hall of the College of Physicians, northeast corner Thirteenth and Locust streets. Credentials must in every case be presented. Gentlemen attending the congress can have their correspondence directed to the care of the College of Physicians of Philadelphia, northeast corner of Locust and Thirteenth streets, Philadelphia, Pa.

There is every reason to believe that there will be ample hotel accommodation for all strangers visiting Philadelphia in 1876. Further information may be obtained by addressing the corresponding secretaries.

All communications must be addressed to the appropriate secretaries.

WM. B. ATKINSON, 1,400 Pine street, Philadelphia,
Recording Secretary.
DANIEL G. BRINTON, 2,027 Arch street,
WILLIAM GOODELL, 20th and Hamilton streets,
American Corresponding Secretaries.
RICHARD J. DUNGLISON, 814 North 16th street,
R. M. BERTOLET, 113 South Broad street,
Foreign Corresponding Secretaries.

Members of the executive committee for Michigan are Drs. R. C. Kedzie, A. Sager and Theo. A. McGraw.

MEMORANDA.

Dr. Denison says that he does not expect to see very profound logical treatises emanate from much greater elevations than that of Denver, Col.

The *Pharmaceutical Gazette* and the Kansas City *Medical Journal* have suspended publication.

Prof. S. H. Douglass is authority for the statement that Prof. P. B. Rose, M. D., of Medical Department Michigan University, has since 1868 embezzeled over $3,000 from the laboratory funds. This Dr. Rose denies, and affirms that the guilt rests with another party. By the showing of the books, about one-half the amount in question has been paid over to Prof. Douglass. From this it would seem that other than medical ethics are practically ignored by the medical faculty at Michigan University.

M. Vulpian has shown that during sleep, the circulation remains nearly normal—neither anæmic or hyperæmic.

Dr. Edward W. Jenks has resigned the professorship of gynæcology in Bowdoin Medical College.

Dr. Eugene Smith has removed his office to his new rooms over Inglis' drug store.

Perspiration is most successfully induced from seven to nine o'clock in the morning.

In Lebanon county, Penn., two hundred cases of small-pox were traced to the funeral of a man who had died of small-pox. The funeral was public and largely attended.

A prominent London physician says: "The babies of London are always intoxicated from the time they are born until they are weaned."

"Society constitutes the final examining board of the young medical practitioner."

Indisputable facts seem to show that a highly trained intellect is antagonistic to reproductive activity.

Dr. R. Stewart (*Medical Times and Gazette*, September 25, 1875) reports a case in which the heart beats persisted ten hours after respiration had utterly ceased.

Sir Wm. Temple said: "Soldiers seemed to have the most honor, lawyers the most money, and physicians the most learning."

In the Massachusetts General Hospital, operations on the mouth are usually done in the erect posture, with special attention to keeping the fauces free of blood.

Dr. M. F. Coomes says that the following is the best insufflator: An ear speculum, Gruber's or Wilde's, is connected by a piece of rubber tubing with a Politzer's air bag.

The *British Medical Journal*, Nov. 13, 1875, reports the sudden death of a health officer, from a serous effusion into the ventricles of the brain. No other cause for death than *worry* respecting a sanitary report could be ascertained.

In 1418 Strasburg was afflicted by an epidemic of trance. Thence vast multitudes made pilgrimages to the Chapel of St. Vitus where they expected to be healed—hence the term St. Vitus dance.—*Beard.*

Referring to his singular tact, energy and judgment, Dr. Henry Wright said: "If Dr. Henry Bennet were stranded on an iceberg in the arctic ocean, he would infallibly create for himself a career among the whales, and end his life as consulting physician to the north pole and director of a sanitarium at the equator."

Sir Charles Lacock won and maintained his great success almost solely by such a union of moral and intellectual attributes as fitted him to shine as a fashionable physician.

It is said that at the hospital of St. Bartholomew, London, there is consumed during a year about seven hundred gallons of cod liver oil, eight hundred pounds of castor oil, and twelve hundred pounds of epsom salts.

Book Notices.

ZIEMSSEN'S CYCLOPÆDIA OF THE PRACTICE OF MEDICINE.—Volume V. Diseases of the Respiratory Organs. Cloth; pp. 712. New York: Wm. Wood & Co. 1875.

The authorship of this volume is divided between Professor Juergensen, of Tübingen, Professor Hertz, of Amsterdam, Professor Ruchle, of Bonn, and Professor Rindfleisch. The first contributes the articles on pneumonia and hypostatic processes of the lungs; the second those on anæmia, hyperæmia and œdema, hemorrhages of the lungs, atelectasis, atrophy and hypertrophy of the lungs, pulmonary emphysema, gangrene, new growths and parasites of the lungs, as well as new growths of the mediastinum; the third the articles on pulmonary consumption and acute miliary tuberculosis; the last the articles on pathology of chronic and acute tuberculosis.

Juergensen shows that, on an average, three per cent of all diseases in the whole population of the globe are due to pneumonia, and that to it is due about six per cent of the total mortality.

"It occurs in all degrees of latitude, and does not seem to be absolutely more frequent in one latitude or climate than in another."

"Its geographical distribution is entirely different from that of catarrh and bronchitis. The latter affections are more frequent as we advance from the tropics to the higher latitudes."

"About two-thirds of the cases of pneumonia occur in the winter and spring months, and about one-third in summer and autumn."

"Rapid changes in the daily temperature undoubtedly favor the production of the disease."

"A marshy soil does not have any constant effect upon the frequency of pneumonia."

"Those communities which lead mostly an outdoor life, suffer less from pneumonia than those which carry on their occupations in confined apartments."

"Persons in the prime of life are not especially exposed to pneumonia, nor are persons of strong constitution."

"It is held that there is no causal connection between a chilling of the body and pneumonia."

Many of the points quoted as bearing on the etiology of pneumonia, are at variance with the usually received opinions, but they are here sustained by a variety of strong proofs.

Pneumonia, anatomically defined, "is an acute inflammation of the alveoli and bronchioles, in which a fibrinous exudation is poured out upon the free surface of the mucous membrane, and there coagulates." Buhl's views of the process of resolution is accepted, viz: "The whole of the hepatized portion of the lung is restored to its normal condition almost entirely by means of the local absorption of the softened alveolar plugs." Of diagnosis, Juergensen says: "It may be laid down as an incontrovertible proposition, that there is no sign pathognomonic of croupous pneumonia." Concerning its nature he says: "Croupous pneumonia is a constitutional disease, and is not dependent upon a local cause. The pulmonary inflammation is merely the chief symptom, and the morbid phenomena are not due to the local affection. The hypothesis of a morbific cause is indispensable. Croupous pneumonia belongs to the group of infectious diseases." A varied amount of proof is brought forward to sustain these propositions. Hence, regarding pneumonia as an acute infectious disease, the indications for treatment are simplified. "Nature cures, and the only duty of the physician is to maintain life until this cure is effected." It will be observed that this is the principle of treatment of all acute infectious diseases.

"The danger in croupous pneumonia threatens principally the heart of the patient. Death results from insufficiency of the heart." Space forbids our quotation of the clear and abundant proof of this proposition.

To prevent the exhaustion of the heart, the fever must be attacked by bathing, cool air, and food; quinine, suitable amount of wine, sleep, etc. In mild cases little treatment is needed besides the regulation of diet. In severe cases treatment may do much if conducted in accordance with the principle that this is an infectious disease, in which the heart's activity must be maintained against the evils which directly threaten it.

Of the etiology of catarrhal pneumonia, Juergensen says: "It is always a secondary morbid process; it never originates primarily in the alveoli, being usually preceded by an inflammation of the bronchial mucous membrane. It is only when an irritant, such as chlorine gas, for instance, has exerted its action simultaneously on the alveoli as well as on the bronchi, that inflammation arises in both at the same time." It follows many acute and attends some chronic diseases. It most frequently attacks those under three years of age, next the aged. In marked contrast with croupous pneumonia, *the principal cause of death in catarrhal pneumonia is respiratory insufficiency.* In treating this disease, the use of baths followed by cold affusions is the best mode of at once combating the fever, and expanding the lungs. To secure the deep respiration without a bath, the following directions are given: "A stream of water, not more than a third of an inch thick, is directed against the back of the head, over the region of the medulla oblongata. Soon a spot will be found, the irrigation of which produces the most violent respiratory efforts." This procedure is effective even when a high grade of carbonic acid poisoning is present, and is to be employed in the last stages of catarrhal pneumonia. The author condemns venesection, blisters, mercury, etc., as worse than useless. After recovery a residence in the country, with judicious exercise of the respiratory muscles, is urgently advised.

Hertz, in discussing the varied causes of congestion of the lungs, adduces the use of cold drinks by persons while heated. He supports his views not only by clinical examples, but by the experiments of Hermann and Ganz. These were made upon dogs and cats, and proved that the influence of cold alone sufficed to increase greatly the blood pressure. The cold acts by contracting the arterioles in the stomach and all adjacent viscera. Of pulmonary hemorrhages Hertz believes that when they occur in persons previously perfectly healthy, "they never give rise to pulmonary phthisis." The pain, rise of temperature, etc., often mentioned in cases of such hemorrhages, are due to disease of the lung, independent of the hæmoptysis. When hæmoptysis occurs during phthisis, Hertz says that there is no reason to believe that it exerts a salutary influence upon the disease. On the contrary, by producing an anæmic condition, homorrhage tends to necrosis of the affected part. Hertz quotes approvingly Von Ziemssen's view that emphysema is developed by the agency of "heightened positive expiratory pressure." That emphysema is usually located in the upper lobes is due to the fact that in forced expiration the auxiliary muscles of respiration, by their contraction, support and so protect the lower lobes. It seems that the above cause is able to produce emphysema in lungs which are badly nourished.

Ruehle estimates the proportion of deaths from phthisis as probably two-sevenths of all deaths. He accepts Hutchinson's observations, which demonstrated that persons with a diminished respiratory capacity, though otherwise perfectly healthy, subsequently became consumptive. The cause of this diminished respiratory capacity he regards as a feebleness of the respiratory muscles. As a result, the main burden of respiration is thrown upon the diaphragm; there is exaggerated respiration in the lower parts of the lung, and diminished respiration in the upper part of the lung. This fact serves in a general way to explain why pulmonary consumption usually begins at the apices of the lungs. An additional reason is found in the peculiar position of these parts. They project above the clavicles, and are thus subjected to the pressure of the external air. The supra-clavicular region sinks in during deep inspiration, and hence the inspiratory expansion of the apices is less than that of other parts of the lungs. On the other hand, forcible expirations drive the air into these parts, and consequently when there is an imperfect expansibility of the upper part of the chest, everything which has been discharged from the alveoli into the bronchioles of this region, or which has otherwise made its way thither, has less prospect of escape, and more of retention, decay, and decomposition. The distribution of blood-vessels, erect posture, etc., are other factors in causing the morbid process to begin at the apices of the lungs. Among the general causes of phthisis, Ruehle believes that while bad air and improper food go together, the bad air exerts the greater evil influence.

"A moist air favors consumption, especially when the temperature is continuously high, or frequent rapid changes are associated with the moisture, while with a dry air even sudden changes (steppes of Kirgnis), and continuous heat (plateaus of Peru) do not induce the disease." The influence of certain currents of air is productive of consumption, apparently by inducing catarrhal and inflammatory respiratory diseases, which may start the disease in those predisposed, or increase it where it already exists. A height of at least 1,800 or 2,000 feet protects against phthisis.

Will bronchial catarrh of *itself* cause consumption? Ruehle answers this question decidedly in the negative. It only produces consumption when allied with conditions or causes which in themselves would induce the disease where there is no catarrh. A person may have one or more yearly attacks of catarrh without becoming consumptive, in fact, the longer they continue, the less is the danger. The same is true of pneumonia. We had marked many other passages for quotation or remark, but lack of space forbids an extension of this notice. The pathology of these diseases, as given by Rindfleisch, will be read with special interest. Like all German works, the parts on etiology and pathology are most satisfactory. Still many suggestions will be found as to treatment—very important in their character. The mechanical execution of the volume equals in substantial taste and elegance any of its predecessors.

THE NEW YORK OBSERVER.—This best of family newspapers is as fresh and interesting, now in its fifty-third year, as ever before; and, indeed, we think it more so. Its letters alone are worth more than the subscription price of the paper. It repudiates all offers of premiums, pictures, etc., and sends to its patrons a splendid family newspaper of the largest dimensions, containing all the desirable news, religious and secular, and an endless variety of reading for young and old, all of which is pure and good. Every family should have it. For specimen copies, address S. I. PRIME & Co., New York.

A TREATISE ON HUMAN PHYSIOLOGY, for students and practitioners of medicine. By J. C. Dalton, M. D. Sixth edition, revised and enlarged; with three hundred and sixteen illustrations. Pages 825; 1875. Philadelphia: Henry C. Lea.

Among the changes in this edition are the following: The matter is fully double that of any previous edition. This was unavoidable in order to at all fairly represent the present state of physiology. By the use of smaller type and larger pages, the volume is not too bulky for convenient use. This increase of matter is largely confined to the account of the nervous system and physiological chemistry. These two sections are especially full and complete—in striking contrast with the account of the nervous system in the last edition. The new plates added here and elsewhere, render the text more readily understood. A considerable number of old plates have been thrown out, to give place to new and better executed ones. The new chemical nomenclature has been introduced into the chapters on physiological chemistry. The quantitative results are given equally with the qualitative, in so far as they are known. Thus every effort is made to give an exact scientific account of the varied physiological changes going on in the body. The general arrangement of the volume has not been altered further than was necessary to accommodate the above mentioned changes. Our need of this edition was great, as the previous one was far behind the present aspect of physiology, as were all other books designed for medical students. It is admirably suited to the wants of those for whom it was written, and we cordially recommend it to their thoughtful study.

For sale by J. M. Arnold & Co., Detroit Mich. Price $6.50.

ARCHIVES OF DERMATOLOGY. A quarterly journal of skin and venereal diseases. Edited by L. Duncan Bulkley, A. M., M. D. Volume I; 1875. New York: G. P. Putnam's Sons. Cloth; pages 384; $3.00 a year.

The volume before us is creditable to the editor, co-laborer, publisher, and the profession which has sustained them. Its original articles are above the average, its translations judicious, its reports of the New York Dermatological Society both instructive and readable, while its digest of all literature pertaining to dermatology is so condensed and classified, as to be readily apprehended by the reader. This digest is probably almost, if not quite, exhaustive; certainly it is the best digest of dermatological literature we have ever seen. We observe a progressive improvement in each successive quarter of the volume, which, we are sure, will continue while the journal is under its present management.

LECTURES ON SYPHILIS and some forms of local disease affecting principally the organs of generation. By Henry Lee, Professor of Surgery at Royal College of Surgeons of England, etc. 1875. Philadelphia: Henry C. Lea. Cloth; pages 246.

These lectures, or abstracts of them, have appeared in different medical journals, hence most of our readers are familiar with their teachings. Much of the subject-matter is not dwelt upon by modern authors, and hence the fitness of placing it in the more available and permanent form of a book. Among these are "the inoculability of syphilitic blood in its various forms; the conditions under which the secretions of primary and secondary syphilitic manifestations may be inoculated naturally or artificially; the morbid processes produced by such inoculations; the modifications of those processes in patients previously syphilitic; primary and secondary syphilitic diseases of the mucous membranes, and their liability to communicate constitutional syphilis; the essential differences of the morbid processes in which the constitutional and local forms of syphilis respectively have their origin; and the pathology and treatment of discharges from the prostate gland, Cowper's gland, and the vesiculæ seminales."

Some of Hunter's doctrines are well illustrated, "a few require to be modified by the light of more recent investigations; others long neglected will still serve as landmarks for generations."

Those interested in the study of syphilis—and what practitioner is not—should not overlook these able and suggestive lectures.

For sale by J. M. Arnold & Co., Detroit.

MANUAL OF MINOR SURGERY AND BANDAGING. By Cristopher Heath, F. R. C. S. Fifth edition. 1875. Philadelphia: Lindsay and Blakiston. Cloth; pages 305.

The appreciation of this work by the profession is rendered apparent by the speedy exhausting of four editions. The one before us is considerably improved by the author's careful revision. Of its kind, it is the best book we have ever seen; those learning the art of minor surgery or bandaging can hardly do better than follow its directions.

For sale by E. B. Smith & Co., Detroit.

HOSPITAL PLANS. Five essays relating to the construction, organization and management of hospitals; contributed by their authors for the use of the John Hopkins Hospital, of Baltimore. Cloth; pages 350. 1875. New York: Wm. Wood & Co.

This book contains the conditions under which the John Hopkins Hospital is to be organized, its relations to a medical school, etc., as stated in the letter and will of John Hopkins. Some seven millions of dollars are thus to be expended, and the trustees, in order to obtain the facts on which to base intelligent action, sought the advice of the authors of this book, viz: Dr. John S. Billings, Assistant Surgeon, U. S. A.; Dr. Morton Folsom, Secretary Massachusetts State Board of Health; Dr. Joseph Jones, Professor of Chemistry, Medical Department University of Louisiana; Dr. Casper Morris, and Dr. Stephen Smith. The volume is indexed for ready reference, and is the latest and best contribution to the vexed question of hospital construction and management. The text of each writer is fully illustrated by drawings, etc., thus greatly adding to its clearness. No one interested in practical hospital construction or management can afford to neglect a careful study of this book.

For sale by E. B. Smith & Co., Detroit.

COMPULSORY VACCINATION. By E. L. Griffin, M. D., Fond du Lac. Reprint from transactions of the Wisconsin State Medical Society.

Such vaccinations, the author calculates, would save to the nation yearly the sum of $2,288,000.

STATE MEDICINE IN ITS RELATIONS TO INSANITY. By Nathan Allen, M. D. Pages 30. Read at the meeting of American Social Science Association, Detroit, May 13, 1875.

The repository of a considerable number of facts respecting State Asylums, etc., difficult otherwise to obtain.

LINDSAY & BLAKISTON'S VISITING LIST, 1876.

This popular, well known physician's companion, needs from us no description or commendation. Its fitness for the wants of the average physician is perfectly understood.

CONTRIBUTION TO THE MEDICAL HISTORY AND PHYSICAL GEOGRAPHY OF MARYLAND. The annual oration before the Medical and Chirurgical Faculty of Maryland, April 14, 1875. By Joseph M. Toner, M. D. Reprinted from transactions of the society.

This is a discourse characteristic of Dr. Toner, full of facts, rather than vague theories, and facts which have an especial interest to the profession of Maryland.

REPORT OF THE HEALTH OFFICER of the city and county of San Francisco, Cal., for the year ending June 30, 1875. By Henry Gibbons, Jr., M. D., Health Officer.

MANITOU, COLORADO—Its mineral waters and climate. By S. Edwin Solly, M. D. Pages 40.

ABORTION—Its causes and treatment. By Walter Coles, M. D. Paper; pages 71.

FRACTURE OF INFERIOR MAXILLARY BONE. By Joseph F. Montgomery, M. D. Reprint from Transactions of Medical Society of State of California, 1875.

TWELFTH AND THIRTEENTH ANNUAL REPORTS of the secretary of the State Board of Agriculture of the State of Michigan. Cloth; pages 700.

FOURTH ANNUAL REPORT of State Pomological Society of Michigan, 1874. Cloth; pages 675.

CENSUS OF THE STATE OF MICHIGAN, 1874. Cloth; pages 500.

JOINT DOCUMENT OF THE STATE OF MICHIGAN FOR 1874. Volumes I, II and III. Pages 1800.

LOCAL ACTS OF THE LEGISLATURE OF THE STATE OF MICHIGAN. 1875. Pages 900.

PUBLIC ACTS OF THE LEGISLATURE OF THE STATE OF MICHIGAN. 1875.

DETROIT

REVIEW OF MEDICINE

AND PHARMACY.

VOL. XI. FEBRUARY, 1876. No. 2.

Original Communications.

ON THE VARIOUS MODES OF GENERATION—ESPECIALLY PARTHENOGENESIS.

Read before the Detroit Academy of Medicine, Dec. 9, 1875. By David Inglis, M. D.

GENTLEMEN—To the mind of a child there is but one mode of generation—the spontaneous; to a child all animals simply are born and grow. To the primitive man there arose, by experience and observation, the knowledge of a second mode—sexual generation. At first the field of action of spontaneous generation would seem by far to exceed that of sexual generation; but, as man's observations multiplied, the relative prevalence of these two modes would seem to change, so that at the time of Aristotle all the higher animals were supposed to be produced by sexual generation, while insects, reptiles, fishes and the lower animals were believed to originate spontaneously.

Not until two thousand years after Aristotle was it discovered that insects also were the progeny of sexual generation.

As the study of nature became more careful and extended, the seeming prevalence of spontaneous generation dwindled away, until now there are but scattered adherents to this doctrine, and it is by them claimed to be the mode of generation in only the very lowest forms of animal life. The doctrine will probably be annihilated at this last stand-point, as soon as we attain to sufficiently improved means of observation.

But, in studying animal and vegetable life, naturalists have come upon other modes of generation, and it is concerning these that I wish especially to speak. The plan of sexual generation, as we find it in the higher animals, is familiar to everyone. Two animals of the same species, which differ in certain particulars and are called male and female, each produce a different cell or cell product; in the female this is a cell called the ovule, which is of nearly uniform character in all species; in the male this is a cell product called a spermatozoon, which is endowed with active motion, and varies remarkably in different species in its form and mode of progression. The whole process of sexual generation consists in these two products coming together, and this result is secured in various ways in different animals—sometimes by actual contact of the male and female, but often this is not necessary, as in fishes, where the females lay eggs in certain localities, and the males coming afterwards lay spermatozoa in the same places; or in oysters, where males and females are both fixtures, and the two products ejected into the surrounding water come in contact, as it were, accidentally. The mode may differ; the end to be attained is the same.

But it is found that often, instead of male and female being distinct, the same individual produces both ovules and spermatozoa. Such is, indeed, the commonest mode in plants, where one flower has both stamens with pollen and ovaries with ovules. Such beings are called hermaphrodites. Many hermaphrodites are capable of bringing ovules and sperm together, so that were there but one such individual in existence, it could propagate its kind. Other hermaphrodites are not so perfect. In some the same animal produces the different products at different times, so that it cannot fructify its own ovules. Others, as the segments of the tapeworm (which are really separate animals), have the male and female organs so separated that they cannot come together, so that the ovules of one segment can only be fructified by the sperm of another.

We now come to a third mode of generation—parthenogenesis, or virgin generation. This is the term used to express generation without the coming together of sperm and ovules. This curious phenomenon, although scarcely known until within the last twenty years, occurs in several classes of animals, but as it is most easily studied in the bee, we will now consider the process as there shown.

In a hive of bees there are hundreds of drones or male bees, thousands of imperfect females or workers and one perfect female, the queen-bee who alone is mother of the succeeding generation. The workers are imperfect females, they never copulate with the males, and are incapable of propagating their species, except as will be mentioned later.

The queen-bee, after its coming to maturity, chooses some warm summer day and comes out of the hive for the first and only time, takes a short flight, and is impregnated by some one of the drones which may be flying about. She then returns to the hive, never again to leave it. The semen of the drones does not go directly to the ovaries, but is received into a special sac which opens upon the oviduct, and is there stored up. As the ovules pass the opening of this sac they are impregnated one by one.

The queen, having returned to the hive, at once begins the great work of her life—laying one egg in each cell which the workers have previously built. The cells are sealed up, and the egg develops into the grub or larva. The workers now begin to feed the larva with a specially prepared food. This consists of a mixture of honey and pollen, which the workers have previously partially digested. All the larvæ receive this food for six days, after which only the queen and drones receive it, while the workers receive honey and pollen undigested.

The queen-bee, besides being fed upon this prepared food longer than the other females, receives special care while developing into the larval state. The probability is that the workers are imperfectly developed, on account of being deficiently supplied with this prepared food, for occasionally a worker is accidentally supplied with more of this food than the rest, and such workers may lay a few eggs. Such is the ordinary course of propagation in a hive. But it was noticed that at times the young brood consisted entirely of drones, and upon observation it was found that the queen-mother of such a swarm was deformed or injured in some way, so as to be unable to leave the hive, and so prevented from copulating with a drone. It was then found experimentally that, on preventing the queen from coming out, after a time she ceases her efforts to escape, and goes about laying her unfructified eggs as usual; and these unfructified eggs, which have never come in contact with spermatozoa, develop, but the new brood consists of males only. This is virgin generation.

Careful studies showed the existence in each bee ovule of a minute opening, a so called micropyle. In all female eggs was found in this micropyle a spermatozoon, while in the male eggs, although the queen had been supplied with semen, no spermatozoa were found. When the imperfect females, who are incapable of copulation, lay eggs, as above mentioned, the progeny are all male. Further proof that the drones are developed from unimpregnated eggs is found by impregnating a German queen bee by an Italian drone, or *vice versa.* It is a rule that in such a case the progeny resemble both parents, but in the bee it is found that the females which come from impregnated eggs do resemble both parents, while the males resemble the mother only, showing that the male does not affect the male progeny.

Ants resemble bees in this respect; the unfructified eggs produce males only. In some butterflies, on the other hand, the unfructified eggs produce regularly perfect females, so that we may have many generations of butterflies where no male has ever been. These, now well authenticated, facts prove that impregnation is not absolutely necessary in all cases. We now come to a fourth phase of generation allied to parthenogenesis. We find several species of animals whose ovaries contain two kinds of ovules, those which can be fructified, and those which cannot. For instance, take the aphides or plant lice. Here we find two modes of generation combined. In the fall of the year each plant louse lays a number of what are called "winter eggs." These eggs are fructified, and after lying all winter, develop in the spring in the usual manner, *i. e.*, by segmentation, but the brood thus produced in the spring are all imperfect females—there are no males. These imperfect females are supplied only with what are called "summer eggs." They have no receptacle for semen, they never copulate; indeed, there are no males with which to copulate. These "summer eggs" produce young, not by the usual process of segmentation, but by a process of aggregation. The progeny are again imperfect females. During the summer the plant lice develope in this manner several generations. About the ninth or tenth generation towards the end of the summer, from these imperfect females, instead of another brood of imperfect females, there comes a brood of perfect females and males, which now copulate, and the perfect females lay now the winter eggs. Here we have both sexual and virgin generation combined.

There are other animals in which both winter and summer eggs are present in the ovaries at the same time, and if the female is impregnated, the winter eggs are developed, while if she is not, the summer eggs only are developed. A somewhat analogous process is seen in the animal called volvox; the mother is here first fructified by a male and produces in her interior a young volvox. This young animal, while still remaining inside the mother, now produces in its interior the next generation, and this third a fourth, etc., until we have five generations, each contained within each preceeding generation, and only the outermost or first member has been impregnated.

A fifth mode of generation is that of budding. This is a process by which from some part of the mother a bud arises, which continues attached until sufficiently developed, when the pedicle is broken, and the young animal begins an independent life. Some fresh water polyps develop in the spring from an impregnated egg, which has survived the winter. Instead of producing by eggs, the animal begins to sent out buds. In some species the buds start from definite localities, in others the buds spring from all parts of the surface, so that the animal is covered with buds. In the marine polyp syphistoma, it would seem that the entire surface of the animal was not enough, so that it sends out a long "runner," from which also a large number of buds arise. In corals which propogate by buds, the buds do not separate, but remain attached, and the form of the coral mass which differs so remarkably in the different species, depends upon the manner in which the buds spring.

A sixth, still different, mode of generation is that by fission, or the splitting up of the parent body into the young. The higher orders of animals cannot replace lost organs, their power of repair being limited to the healing of wounds, or, at most, to the regeneration of bone from periosteum. As we descend in the scale, the power of repair increases, so that spiders, crabs, etc., can replace lost limbs. Going still further we come to animals which, from a separated limb or tentacle, or other small part, can reproduce a whole body, with all the special organs.

The hydra, a fresh water polyp, can be cut in slices in all directions, and from each slice a new perfect animal is developed. In nereids, the normal mode of generation is by splitting into a great number of segments, each of which soon acquires all the organs of the perfect animal. Some split thus transversely, others longtitudinally.

A curious thought in this connection is that some part of the original polyp continues to remain in successive generations, thus constituting a sort of immortality in a divided state.

Before now proceeding to consider the seventh and last mode of generation, it is necessary to turn aside and consider a remarkable although common phenomenon—that of metamorphosis. In strictness, all development is a metamorphosis, a change of form, but the term, as used, indicates the distinct changes in form and mode of life which some animals undergo as independent beings.

The common type of a metamorphosis is furnished by the butterfly. The eggs of the butterfly develop into the larvæ. If the process ended here it would not be a metamorphosis, but we find that the larva, after eating ravenously and growing much, proceeds to enclose itself in some sort of protective covering, in which it remains, and is metamorphosed into a chrysalis, which so little resembles a larva that no one unacquainted with the facts would suppose that the two could be in any way related, much less the same animal.

After remaining in this state until from the excess of nutriment, which the larva stored up, the organs are fully formed, the chrysalis opens, and is now metamorphosed into the final product of the series, the butterfly. Such is a metamorphosis, and only the final member of the series is capable of reproducing its kind. The other forms are unsexual. This, then, enables us to consider the seventh mode of generation—alternate generation, which is a combination of metamorphosis, sexual and virgin generation. As perhaps the simplest example of this complex phenomenon, let us take the animals called salpæ. Twenty or more years ago there were described two species of salpæ, which were found peopling the surface water of the sea. One of these, the chain salpæ, resembled a chain, or rather a lot of ovoid bodies loosely attached end to end (like a lot of bird's eggs strung together). The other species were the radiate salpæ. From a central round body a number of rays projected, and at the end of each ray was a round body resembling the central body. These were known as a distinct species until some one discovered that inside of each of the ovoid bodies in a chain was to be found a radiate salpa, and inside of each of the round bodies of a radiate salpa were to be found chain salpæ. These proved to be the young ones, and thus it appeared that each young salpa resembled not its mother but its grandmother. The links in the chain salpæ are sexual, and their progeny, the radiate salpæ, are unsexual, producing their young, *i. e.*, the chain salpæ, by a process of internal budding.

The tæniæ are of similar character. Each so-called tape-worm represents two alternate generations of one animal. The head is an individual animal, supplied with suckers and hooks, by means of which it attaches itself. It has no sexual organs, but produces its young, the remaining segments of the series, by a continuous process of budding, the successive buds or segments remaining attached to each other. Each member of the brood thus produced is unlike the head, having no prehensile organs, but they are supplied with sexual organs, and produce their young from impregnated eggs. The progeny of these eggs are a kind of sac, out of which, in turn, a tape-worm head is produced. Such is the process in most species of tænia, but in tænia echinococcus the process attains a still greater complexity. The head develops the buds or segments, and the segments produce ovules, as just described, but each ovule, instead of producing a sac from which one head is developed, produces a sac which develops from its interior a number of heads. These sacs are permanent, and become at times much thickened and very large, constituting the large tumors which are sometimes found in the human liver. Here, then, we have three alternate generations. A, the head, produces B, the segments, by budding; B, the segment, produces C, the sac, by regular sexual generation; and C, the sac, produces again A, the head, so that in this way the child resembles the great-grandmother. As if this process were not complex enough, nature has produced animals in which the parent, A, produces both young which resemble itself and other young B, which in no way resemble it, but whose grandchildren resemble the parent A. Indeed, the process becomes too difficult to follow except with the aid of diagrams. Such is alternate generation. It would seem to be a modified form of metamorphosis, in which the members of the whole series are capable of reproduction, instead of only the last of the series, as is the case with the butterfly.

As the summing up of our studies into the processes of generation, we find that they are curiously and wonderfully complicated, instead of being so simple as is ordinarily thought, and yet all these various plans have two facts in common. The first is that each new individual arises from and includes some part of the maternal body, which transmits to the young individual the thing which we call vitality, and is the means, probably, by which parental traits are inherited by the young. The second fact is that the specific type is always retained and returned to, no matter how many alternate generations or metamorphoses may intervene.

Appendix—*Authors Consulted.*—Prof. Munk, of Berlin—Lectures; Aitkin—Practice of Medicine; Smithsonian Institute Reports for 1871; Packard—Guide to Study of Insects; Cobbold—Entozoa; Henry Goadby—Animal and Vegetable Physiology.

ERGOT—ITS PHYSIOLOGICAL AND THERAPEUTICAL ACTION.

Read before the Southern Michigan Medical Society. By A. R. Smart, M. D., Hudson, Mich.

THIS agent, although so common and long known, has until recently been imperfectly understood, both in its chemistry and in its physiological action, and at present we have much to learn regarding the former.

Ergot consists of a blackish body, one or two inches in length, irregularly cylindrical, grooved along one side, and generally curved. It belongs to the lowest of vegetable organisms, viz., the fungi, and is the product of an intermediate condition between the formative and reproductive stages of those bodies. It is developed in the pistils of many species of the gramineæ, but one only of which is officinal, that of the secale or common rye. Ergot has a very complex chemical constitution, and is very susceptible to change upon exposure to the air or to dampness. This is true also of its preparations. It contains nearly thirty-five per cent of a fixed oil. It also contains propylamin in considerable quantity, to the presence of which its peculiar mouse-like odor may be attributed. Wanzell says it contains two alkaloids, soluble in water and alcohol, but insoluble in ether or chloroform; these he calls ecboline and ergotine, and says that they each exist as an amorphous brown powder, feebly bitter in taste. Eugene Handelin denies that these alkaloids are the active principles of the drug, as he found a watery solution efficient after precipitation with tannic acid and corrosive sublimate.

All of the earlier uses of the ergot, from which oxytocic effects were obtained, were with watery infusions. Levi, of Munich, says ergot contains large quantities of phosphoric acid, to which he attributes its action. A committee of the Chicago College of Physicians and Surgeons, appointed to investigate the properties of ergot, reports two preparations—a watery and an alcoholic extract, which differ widely in their nature and action. Wernich thinks the watery extract far more powerful than either the alcoholic or ethereal. He thinks the best preparation is made by exhausting the drug, first with ether, then with alcohol, and lastly with water; then evaporating. Dr. Squibb, of Brooklyn, evaporates a watery extract on porcelain.

While the active principle of ergot is not well defined, it seems certain that two separate, distinct principles exist in the drug—the one obtained by a watery solution and the other by an alcoholic solution—which differ entirely in their nature and physiological action. Precisely what these principles are, is at present undetermined.

Physiological Action.—The older writers, in describing the action of ergot on man, speak of it as producing nausea and vomiting, with colic, and sometimes diarrhœa. Salivation was noticed in many instances; it was said to cause head-ache, vertigo and dilatation of the pupils; the heart's action was increased by poisonous doses, but slowed by smaller ones, both the frequency and force of the pulse being lessened. The effect of ergot in exciting contraction of the gravid womb, was the means of bringing the drug into notice, and has until very recently been considered its chief, if not only action of therapeutical significance. This is evinced by the name given it by the Germans, "*Mutterkorn*," or "womb-grain."

For years after ergot was known and used in medicine, its oxytocic action, which is but one link in the chain of its pathogenesis, entirely overshadowed its other properties. A few years ago Brown-Sequard announced the fact that ergot, in common with belladonna, had the power of lessening the blood supply of the brain and spinal cord, by contracting the calibre of their vessels. This he verified by actual observation of the meningeal vessels while under the action of ergot. This discovery led to a series of investigations, which have resulted in giving us an extended idea of the action of ergot, which, although as yet incomplete, has placed it in a prominent position in the list of therapeutical agents.

We may say, in formulating the action of ergot, that it acts mainly upon the ganglionic centres and upon the non-striated muscular fibre wherever found. It is a certain and unfailing vasomotor stimulant, contracting the calibre of the blood-vessels in all parts of the body with great certainty and promptitude, whenever given in quantities sufficient to develop its action. It is equally certain in effect as a stimulant of involuntary muscular fibre. Brown-Sequard asserts that, when it is given in poisonous doses, this muscular spasm gives way to paralysis. Its action on the circulation is specially marked, invariably causing contraction of the calibre of the blood-vessels and diminution in the frequency of the action of the heart. The latter is so rapid a result that some German observers noted a fall of from four to six pulsations in one minute, from the hypodermic use of ergotine. Observers vary in their statements whether or not the force of the beat is diminished, but it is quite certain that the blood pressure is increased. In the light of these statements, the symptoms formerly ascribed to ergot are made intelligible. As we have seen, it contains two principles—one soluble in water, and to which its action on the blood-vessels and non-striated muscular fibre is due, and the other soluble in alcohol, to which the symptoms of irritation of mucous membranes and the disturbances of the cerebro-spinal nerves are attributable.

Dr. Kohler found Wigger's alcoholic extract or ergotine produced tonic cramps and spasm of the extremities, with greatly increased irritability of the peripheral motor nerves, while Bonjean's, or the watery extract, acted on the heart and blood-vessels, causing contraction, slow pulse and increase of blood pressure. This effect he ascribes to stimulation of the inhibitory centres of the heart and of the vaso-motor centres in the medulla. Large doses, he found, paralyzed the heart. The watery extract lessened the irritability of the peripheral motor nerves. Both extracts slightly reduce the temperature and the frequency of respiration; both dilate the pupil; both diminish the irritability of the sensory nerves. The colic, nausea, vomiting, salivation and diarrhœa produced by ergot, are the effects of the principle soluble in alcohol, as are also the cramps, staggering and trembling of the limbs, while the sense of faintness, of vertigo and swimming of the head, the disturbances in the action of the heart, and the coldness of the surface, are symptoms caused by the principle soluble in watery infusion, and are attributable to the lessened blood supply to the parts. The action on involuntary muscular fibre, of which its oxytocic effects are a part, is also to be assigned to this watery principle. This view is supported by the fact that for years all the use made of the drug was by means of the infusion. It may be questioned whether ergot has any power over the uterine fibre, that it does not possess in common over all the non-striated muscles. It is certain its influence is not confined to that organ. It has a similar action upon the intestine, the bladder and non-striated fibre generally. In this it is an analogue of belladonna, quinia, lead, and, in greater or less degree, of many other agents. The relationship of ergot and belladonna is specially marked. We have noticed their similar action upon the blood-vessels—they each dilate the pupil, relieve pain, lessen excessive secretion, arrest hemorrhage, and act alike on organic muscular fibre and the cord.

Several observers have noticed the increased peristaltic action in the intestine, produced by ergot. Dr. Williamsky, in experiments made upon dogs and rabbits, says immediate contraction of the bladder ensued upon the injection of ergot, and it seemed to excite both the sphincter and muscles of the body of the organ. Its action upon the gravid womb is familiar; upon the unimpregnated organ it is much less marked, the susceptibility to its influence increasing in proportion to the development of muscular fibre. A Russian, with an unpronounceable name, observed as a result of full doses an arrest, and, in some instances, a suspension of the mammary secretion. He also observed the same effect in cows fed on straw containing ergot. It is as yet an undecided question whether ergot produces its results by centric or peripheral action. Eberly found that after division of the *par-vagi*, large quantities of the drug failed to produce cardiac arrest, and in frogs and mammals, after paralysis of the peripheral vagi by atropia, ergot was powerless to effect the system of the heart. We know the pneumogastric is the inhibitor of the heart, and the fact that ergot in smaller (stimulating) quantities, slows its action, while in quantities sufficient to paralyze the vagi its action is accelerated, would tend to show that its action on the heart was through the vagi. Paul Vogt found the vessels in the ear of a rabbit from which he had extirpated the cervical ganglion, could not be made to contract by the hypodermic use of ergot. Dr. Drashe, in some experiments with ergot, found a strong solution when brought in contact with a bleeding surface, even a severed artery, had the effect of lessening its calibre and checking the hemorrhage. Other known local uses of ergot seem to favor the view of its peripheral action, yet it is probable that its chief activity is centric. If ergot is given for a long time, or in very large quantities, disastrous results may follow. From large doses the vaso-motor stimulation and tonic muscular spasm caused by smaller doses, may pass over to a condition of paralysis and relaxation. If the action be long continued, the blood supply may be so much interfered with as to arrest the nutrition of the tissues, while softening from anemia of the brain and nerve structures, with paresis of muscles, results. It produces in the extremities a form of gangrene, which Simon says exactly simulates that caused by arterial obstruction.

Therapeutical Uses.—Having now briefly glanced at the physiological action of ergot, we will notice some of the therapeutical uses of the drug, which may thus be suggested. The statement may safely be made that we have no hemostatic so prompt and reliable as ergot. It has been tested so many times, and in so many varieties of hemorrhage, that such an assertion is fully warranted. Nor is this more than we should expect when we consider its unfailing, universal power of contracting the calibre of blood-vessels and lessening blood flow. Its use in uterine hemorrhage, both ante and post-partum, is familiar, acting both by contracting the muscular fibre and directly upon the vessels. It is much more prompt and efficient if used hypodermically, especially if the hemorrhage has been excessive, absorption in such cases being slow. Dr. Williams, of Baltimore, reports some cases of its hypodermic use in post-partum hemorrhage with complete success. Dr. Boardman, of St. Paul, records a case of placenta previa in which, after failure with other means, the hemorrhage was arrested upon different occasions, and the patient finally brought within two weeks of full term by means of ergot used hypodermically. In all forms of hemorrhage occurring during gestation, and in threatened abortion, ergot is invaluable. A frequent cause of hemorrhage and premature uterine action is a lax, feeble state of the uterine fibre, with relaxed vessels, or in other cases a congested, over-full state of the organ, in either instance allowing oozing of blood and partial separation of membranes, which provokes uterine action. In these cases the use of ergot in quantities sufficient to produce a tonic contraction of the vessels and fibre of the organ, arrests the mischief, and, together with the use of opiates to lull pain already commenced, will generally prevent farther trouble. No fear need be felt with the moderate use of ergot here; the uterine fibre is undeveloped, at least during the earlier months of pregnancy, and much more danger will arise from the hemorrhage and its results than from the action of ergot. It has happened, doubtless, many times, that after the administration of ergot in cases of supposed certain abortion, for the purpose of hastening the result, the physician has been surprised to see the hemorrhage and pain cease, and the process become suddenly arrested. I can call to mind one case in particular, occurring during the later months of gestation, in which I repeatedly arrested attacks of pain and hemorrhage which threatened premature labor, and succeeded, by the use of ergot and morphia mainly, in nearly completing full term.

In congestions, displacements and enlargements of the unimpregnated uterus, ergot is often of value used in the form of suppositories, and in combination with quinine and belladonna, it is a most useful application in cervical congestion, displacements, imperfect involution, leucorrhea. It is used in these various uterine diseases by the Italians with alleged great success; the use of ergot in the treatment of fibroid tumors of the uterus, a practice introduced by Hildebrandt, may be considered fairly established. If the success claimed for this treatment by its originator has not been fully realized in the hands of others, yet so large a measure of success has been attained, as to place its value beyond question. Of one hundred and three cases of uterine fibroids collected by Prof. Byford of Chicago, and reported by him to the American Medical Association at the last meeting, twenty-three were cured; in thirty-eight hemorrhage was arrested and the tumors decreased in size; nineteen were benefited, while twenty-one resisted treatment. In some of the cases he injected the ergotine into the cervix or into the tumor itself, instead of the surface of the body. He prefers for hypodermic use the watery extract. Dr. Parvin records three cases successfully treated with the watery extract, and says the addition of glycerine caused abscess. Dr. Reeves Jackson, of Chicago, reports five cases treated, three of which were successful; used watery extract prepared by Squibb. I have used ergotine in one case of interstitial uterine fibroid, occupying the posterior wall of the organ; the cavity was increased to four and one-half inches. The patient, a lady of fifty-three years, had suffered over a year from exhausting hemorrhages, and was very anæmic and much reduced in strength. For some weeks before commencing the use of ergotine, she had been partially aphasic, and had suffered incomplete hemiphlegia. The injections were made over the lower portion of abdomen with a solution of ergotine in glycerine and water at first, which irritated so much that it was changed for the fluid extract. The injections were repeated every second day for about six weeks. The hemorrhage then having entirely ceased for four weeks, and the general appearance being much improved, they were omitted. The hemorrhage soon returned, and the injections were resumed and continued for two months with immediate effect in arresting the metrorrhagia. The patient then passed from my observation, but I have since learned that up to July last, over three months afterward, she had been free from a return of the trouble.

According to the experience of most observers, ergot is most certain to benefit when the growth is firm and elastic and has not degenerated, but remains vascular. When its seat is sub-mucous or interstitial where the uterine walls are healthy and capable of contraction, the ergot acts not only by directly cutting off blood supply to the tumors, but also in causing contraction of the uterine wall, and exciting atrophy.

Dr. Collins, of New York, reports a case of sub-mucous sessile fibroid, which, by the use of ergot, he converted into a polypoid, form, which he readily recovered. It has been said that the oxytocic action of ergot is due to its power of lessening the quantity of blood in the uterus, and allowing its muscular fibre to act.

Whether this view be correct or not, ergot is by no means certain or desirable as a parturient. It produces a tonic unremitting contraction of the uterus, being very unlike in character the alternate contraction and relaxation of true labor. I have often queried after the use of ergot in tardy and irregular labor; if it did not rather impede than facilitate the progress of the case. Further than this, the use of ergot during labor is not wholly devoid of danger. The rigid prolonged contraction which it induces may seriously compromise the safety of the child, by cutting off its blood supply, and causing asphyxia. The alternations of contractions and relaxations in labor are not without a purpose, and the unremitting pressure upon the lower segment of the womb, and upon the soft parts may be productive of mischief. It is said that its use in small doses is best during labor to simply excite contraction, without inducing its tetanic character. This is perhaps true, but as a parturient, ergot is much inferior to cohosh, quinia, morphia or stimulants as may be demanded; or if these fail, the timely use of the forceps. I apprehend that at no distant day, what was considered the chief use of ergot, will come to be one of the least of its therapeutical features. However undesirable ergot may be during labor, it is certainly invaluable afterward in inducing a firm tonic contraction, which lessens the dangers of hemorrhages, and tends to expel any clots or shreds of membrane that might remain and cause pain, inflammation or septicemia. It will likewise prove of value if continued until involution is completed; given in quantities that will maintain freedom from relaxations and engorgements.

In diseases of the bladder, the stimulant action of ergot may be, and has been, utilized. Dr. Williamsky used it with success in the atony of the bladder, frequently referred to as paralysis. The fact that cases of poisoning from ergot are generally found to have disturbed bladders would seem to contradict this assertion, but this is to be attributed to its action on the vesical sphincter, an effect I have observed several times when using it hypodermically in the abdominal region. The possibility of this condition should be kept in mind when administering ergot during parturition, and the state of the bladder be carefully watched. May it not be true that cases of vesico-vaginal fistula have occurred from this cause?

The hemostatic action of ergot is as marked in other localities and conditions as in those recited. It has been used in the hospitals at Vienna with success in the treatment of hemorrhage from the lungs, nose, kidneys, and in intestinal hemorrhage during fevers (*Medical and Surgical Reporter,* Vol. xxx, p. 173). Dr. Ritchie, of Manchester, England, reports twenty cases of hemoptysis treated with prompt and decided success by means of the hypodermic use of three to five grains of ergotine (*Amer. Jour. Med. Science,* April, 1872; p. 538). The late Dr. F. E. Anstie says ergot is the best known remedy for hemoptysis. He advises its hypodermic use. In the *Medical Recorder* for May, 1875, a case of purpura is reported. It occurred in a child of seven years, and had resisted various plans of management. The hypodermic use of one grain of ergotine, twice in twenty-four hours, completely arrested the hemorrhage. The case is described as a severe one, and when first seen, blood was issuing freely from nearly all the mucous orifices of the body. The writer believes the idea that this disease is the result of fatty degeneration of the capillary vessels is untrue. He suggests vaso-motor paralysis as the condition, and ascribes the beneficial effect of ergot to its power of inducing vaso-motor spasm. In the same journal is recorded a case of epistaxis in an adult, where, after failure of other means, the use of twenty-drop doses of fluid extract of ergot at once controlled the bleeding, the same result following the use of the remedy in a subsequent recurrence of the hemorrhage. Prof. Voigt, of Griefswald, reports an extensive varix of the leg which had existed for years, and was cured by two injections of ergot, and remarks that in various other cases results equally remarkable followed this treatment. He says the cure was accomplished in part by the contractions of the arteries and veins, and in part by the pressure of the infiltration caused by the injection. Whether the cure was permanent or not, the professor does not know, as sufficient time had not elapsed to determine that fact. He further says that he has used ergot with good results in hemorrhoids and varicocele. For the latter disease ergot has been frequently used successfully by the Italians. The use of ergot in prolapsus ani, by Von Langenbeck, was the means of suggesting to Hildebrandt its use in uterine fibroids. Von Langenbeck states that he has astonishing success with the use of ergotine in prolapsus ani. He uses five to fifteen parts of ergotine, to one hundred distilled water, or sometimes in aneurism, ergot two and one-half parts, and alcohol seven and one-half parts. He throws the fluid into the cellular tissue at the side of the rectum, at intervals of three or four days for as many weeks. Dr. Semple, of Virginia, says rectal injections of fluid extract ergot will accomplish the cure with less pain and inconvenience than results from Von Langenbeck's method.

Ergot has been recommended by Langenbeck for the treatment of some forms of aneurism, especially the intra-cranial variety. Ergot has been found of service in many kinds of inflammation. When we consider its influence over the heart and blood-vessels, and its power of lessening the blood supply of parts, it theoretically would seem of value in inflammatory conditions, and this has, to some extent, been verified in practice. Dr. Wysick employed it in the treatment of croupous pneumonia, and says it lessens exudation and subsequent expectoration. In one instance an excessive albuminous expectoration ceased in two hours after the administration of nine grains of powdered ergot, repeated every fifteen minutes. He cautions against its use in debilitated and emphysematous subjects. Dr. T. Curtis Smith, of Middleport, Ohio, recommends ergot in all inflammatory diseases of the air passages. He says it relieves congestion and prevents exudation. One of the essential conditions of inflammation is stasis, dilated capillaries, vaso-motor paralysis and exudation. Ergot, we know, directly antagonizes this condition, and that it should relieve inflammatory states is palpable. Dr. Bonjean, the originator of the extract that bears his name, states that in the Hospital St. Andre, at Bordeaux, the mortality after amputations had been largely reduced by the administration of fifteen to forty-five grains of ergotine, daily, for fifteen days succeeding the operation, the effect being to lessen inflammation, and to diminish, and sometimes wholly prevent, suppuration (*Med. News and Library*, April, 1869). Dr. Luton, of Rheims, found when administering ergot for the relief of a uterine hemorrhage in a patient, who, at the same time, was suffering from dysentery, that both conditions were alike relieved by the action of the drug. He afterward gave ergot in powder, forty-five grains per day, in a case of dysentery, and found it promptly quieted the tenesmus, and arrested the bloody discharges. It may also be of benefit in dysentery by exciting peristaltic action in the bowel, above the seat of inflammation—a locality usually in a state of inaction and torpor in this disease. Dr. Jacobi, of New York, says the antiphlogistic action of ergot is marked. He has used it in spinal meningitis, in infantile paralysis dependent on congestion of the cord, and in some cases of chorea. He declares that intermittents may be arrested by it, that have resisted the action of quinia and arsenic. He uses it in large doses, giving ʒij of fluid extract to children, and has no fear of producing ergotism. He continues ℈j doses of ergotine daily to adults for a long time, without bad results. Dr. Dubone, of Pau, says of fifteen cases of palustral fever treated with ergot, fourteen were arrested. Dr. Reed, of Boston, a year or more since reported several cases of cerebro-spinal meningitis successfully treated by him with ergotine and belladonna.

The controlling power of ergot over the circulation of the brain has been utilized by many observers. Dr. Kitchen, of Utica Insane Asylum, says of one hundred patients with plethoric congestive types of headache, who took ergot, in nearly all the attack was cut short in one-half hour. He uses it also in epilepsy, and in some forms of insanity. Dr. Mann, of New York State Asylum, on Ward's Island, uses ergot in acute mania of congestive form, with marked benefit. He gives from ʒss to ʒj of fluid extract, or five to ten grains ergotine three times daily. J. Crichton Browne, of West Riding Asylum, England, uses ergot in many forms of mental diseases. In mania he says it calms excitement, shortens the attack, and widens the intervals of their occurrence. Other observers make similar statements, and, perhaps, in no disease has ergot attained a better reputation, than in acute congestion of the brain and cord. Dr. Hampel says he has derived great benefit from ergotine in whooping cough and in laryngeal spasm, and thinks it lessens congestion and increases normal secretion. Dr. DaCosta reports two cases treated by ergot, one a case of diabetes insipidus, successfully treated by ʒj fluid extract ergot, *ter in die*; the second, a case of that obscure disease of the blood, leukemia of the splenic variety, treated with ergotine, five grains, given on alternate days, and which was cured after the eighth injection (*New Rem.*, April, 1875, 105).

As regards administration, ergot may be best given internally in the form of fluid extract, of which the acetic is the most reliable; or the alcoholic or watery extract may be given internally according to the action sought. When ergot nauseates, or when a prompt effect is needed, the hypodermic use is the best, and will sometimes succeed after other forms of administration have failed. It may also be used in suppositories, rectal or vaginal. Professor White, of Buffalo, has used ergotine in this manner, in the treatment of uterine fibroids, and remarks that, used in the rectum, it sometimes incidentally cured an obstinate constipation. The chief objection to the hypodermic use of ergot is the tendency to inflammation and abscess. This may be avoided by using the watery extract, made after Squibb's method. The addition of a small quantity of alcohol increases its activity, renders it less prone to change, and does not increase irritation.

Hildebrandt advises that the needle be thrust deeply into the tissues to avoid abscess, a proceeding I have found successful. Although sometimes used, I am certain the addition of glycerine adds to the irritation produced; in the absence of any other preparation, the fluid extract may be used hypodermically. As to the locality, I am disposed to believe it should be as near the diseased tissue as possible.

In conclusion, gentlemen, permit me to say I have no disposition to assign to this drug a more prominent position in therapeutics than it merits. My object, in thus calling attention to it, and in reviewing its action, both physiological and therapeutical, is to subject it to the only real test of a supposed valuable agent, viz., clinical experience. If it shall prove to be as valuable in certain diseased conditions as its physiological action would lead us to believe, then shall we have added another to our list of specific curative agents. If not, then it must be consigned to the obscurity of so many vaunted specifics in the past.

THE CONDITION OF THE CAPILLARY BLOOD-VESSELS IN INFLAMMATION.

Read before the Southern Michigan Medical Society, by Chas. T. Southworth, M: D.

It has been written that, "The progress of science resembles the course of the spiral. It advances continually by departing from the centre, and returns in circle-movement ever again towards it. The short-sighted either observe only the advance and overlook the return, or, on the contrary, recognize only the circle-movement, and the advance escapes them. Science, however, presses eternally forwards, but is ever bound in the meantime by the limiting radius of human knowledge."

Of the many questions growing out of the discussion of that most complex process—inflammation, I think no one has been so faithfully argued, with so little result towards a final settlement, as the one above mentioned. Some claim for the capillaries a contractile power, which is exerted for a time, and leaves them in a state of debility. Others deny this power to contract, asserting from the beginning that the vessels are enfeebled. Others believe in the active dilatation, caused by an alteration in the electrical state of the atoms constituting the walls of the capillaries involved. The microscope has been resorted to for settling the question, and, although the same means have been made use of by the different observers, different conclusions have been arrived at. All agree that the application of artificial stimuli to the tissues is followed by a period of dilatation of the capillary walls, and that there is a stagnation of the blood corpuscles. Some claim that contraction precedes this dilatation, while others observe the dilatation only.

Now, from the anatomy of the capillary blood-vessels, it is clear to me that they are merely channels for the passage of the blood, dilating in obedience to pressure from within, and contracting through pressure from without; that their structure is simple, and, according to Virchow, of a coalescence of cells, forming a so-called structureless or limitary membrane.

In the frog, M. Lister, of Edinburgh, has described non-striated muscular fibres, arranged spirally around the smaller arteries of the extremities. The presence of elastic fibres in the coats of arteries generally is known, but these are not an evidence that active dilatation can or does exist in the animal economy. Exercise or use causes contraction of muscular fibre, and, when the contrary motion is to be made, another set of muscles is provided to contract in their turn; hence the only use of a contractile power in the capillaries would be to prevent over-distension of them by blood sent from the heart, and the continuous character of the current in them is not at all like the peristaltic motion which would exist were the passage of blood caused wholly, or in part, by such a contractile power as is claimed by some observers. The power by which the blood is carried along in the capillary vessels, is found in those tissues which occupy the interspaces of the capillary network throughout the body.

These tissues or structures derive their nutriment from the blood, and, as soon as they have exhausted that portion of the blood nearest to them, they attract that which succeeds it, and so on, the new supply pushing that which has become more or less effete on before it.

Every part of the body is endowed with that vascularity which is required to fit it for its part in the animal economy, so the susceptibility to stimulation varies greatly. Some parts are liable to, and indeed demand, an incessant flow and ebb of blood in their changes of rest and activity; others are uniform in the quantity of blood they contain, and in the stimulation from nutrition they require. The question now arises how to account for their fluctuations. There is but one rational way, and that is the *sine qua non* of vital force, which is neither more nor less than vitality—life itself, of which the arterial blood is the seat, and without which there can be no life; the nervous system, the muscular fibres, striated and nonstriated—the whole animal economy is dead without it.

The difference shown by comparative physiology between the higher and lower orders of living beings—all mammalian, is the difference of physical structure and of the ingredients of the arterial blood; as this is constituted, be it red or white, warm or cold, so is the degree of vitality with which the being is endowed. When a function, either voluntary or organic, is performed, there is a greater call upon vital force in the part—consequently an increased activity. This may be either mechanical or chemical in its course, or it may be from some influence less readily explicable—never spontaneous. In this we find the importance of the principle of reflex action, as by it we are enabled to trace the chain of phenomena. This increased activity demands a greater afflux of blood, as it involves greater waste of substance, and the nutriment must be increased. It is, therefore, because the intervascular structures demand more nourishment that the part receives more blood, and not because the capillaries are enfeebled or unusually dilated.

As the causes of inflammation, I recognize primarily stimuli, increasing the activity of function of the part involved, and depressing agents, secondarily, having the same effect. The exact method in which either exert their influence I do not know, and I never shall be enabled to solve this mystery; but, be it whatever it may, stasis of blood in the part concerned is the result. This is the first stage of inflammation; here destruction sets in, and, if not alleviated, death of the part will follow. The tissues are unable to dispose of the blood they have acquired. It therefore stagnates, the vessels are blocked up, and, as the general circulation goes on, the fresh blood must find an outlet somewhere; and a crowding of the vessels ensues in the focus, and the obstructions spread outwards to the healthy parts around the obstruction. Absolute gangrene or death of the part must result. The application of uniform pressure tends to restore the capillaries to their normal unembarrassed condition. It also has an obtunding influence upon the nerves of the part, and allays pain. We have at hand, also, therapy proper to be used in such conditions, and with relief to the sufferer.

To Haller be given the credit of developing the attraction theory of the capillary circulation, which has been adopted by physiologists, and which alone will stand scientific investigation; and, in my opinion, presents the "truer combination of solidism and humoralism," as the venerable Virchow says of his cellular pathology.

GLAUCOMA.

Read before the Southern Michigan Medical Society by John H. Curry, M. D., Toledo, Ohio.

JUDGING from my own observation, and the statements occasionally made to me by my fellow practitioners, I am constrained to believe that within the domain of ophthalmology there is no subject with which it is more necessary for the general practitioner to be conversant than glaucoma, or the green cataract of the fathers of medicine. Little was known about this affection in the past, and physicians even of to-day frequently fail to recognize it until it is too late. I am quite certain that many of you can substantiate this by recalling cases within your own observation whom it has deprived of the inestimable sense of sight. I know, from past experience, that the labors of the general practitioner are, at best, too onerous—that entirely too much is expected of him—yet it is absolutely necessary, for the sake of his own reputation and the welfare of his patients, that he should be familiar with the cardinal points of many of the affections which legitimately belong to specialties, and which can only be thoroughly understood and expertly handled by those who have critically studied all the details. Still the duty devolves upon him of being able to recognize a simple from a grave and serious affection, and determine when it is necessary to apply to the specialist. If I succeed in enlightening any one upon this particular subject, or stimulate him to further investigation of it, this paper will have accomplished its mission.

Glaucoma was regarded by Hippocrates and the ancient Greek physicians as an opacity of the crystalline lens, although it was recognized by the green reflection which often accompanies it as being peculiar, and differing in its results from other opacities, which were classed as curable; this opinion seems to have prevailed up to the year 1709, when Brisseau put forth his doctrine that it was an opacity of the vitreous humor. The pathology is still obscure, though much of the rubbish has been cleared away. Recent observers entertain decidedly different opinions concerning it. Some think the primary cause due to an irritation of the nerves regulating the intraocular secretion; others that it is due to an inflammatory action along the uveal track; others that an abnormally rigid sclerotic plays a very important part in lighting up the disease. Mackenzie proved, in 1828, that the green reflection did not proceed from the lens, but was caused by the senile change in its muscles. From this it follows that should the disease occur in the eye of a youthful person, or where the lens is absent, this green reflection, which was formerly regarded as pathognomonic, would not be present. The production of the ophthalmoscope by Hemholtz, in 1851, and the observations made with it since that time, have familiarized us with certain symptoms, by which we can diagnosticate this affection with certainty. Although the particular symptoms attending the various forms of glaucoma are strikingly different, they often pass into each other, and all show a certain family resemblance; besides, there are some signs common to them all, without which it is impossible to conceive of a glaucomatous condition. The most important and practical difference exists between those forms which are accompanied by decided inflammatory action, and those which sometimes run their whole course without exhibiting any external vascular excitement of the globe. The form which we most frequently meet is the acute inflammatory glaucoma, the arthritic ophthalmia of the older writers. This variety usually has its prodromal stage. Like the coming storm, it manifests its approaching outbreak by certain periodic threatenings. The patient usually observes slight obscurations of vision, objects are not clearly defined, and appear as if shrouded in a mist. The degree of this dimness varies exceedingly, and is quite evanescent, coming and passing away in very brief periods of time. If he is presbyopic, you will find, during the course of these attacks, that the ciliary muscle does not properly perform its functions; that he will be compelled to change his reading glasses for stronger ones, much more frequently than is necessary for persons with healthy eyes. The iris is usually slightly dilated, and responds sluggishly to the stimulus of light; the aqueous and vitreous humors somewhat cloudy. This haziness may disappear and return several times during the course of a few hours. If he looks at the flame of a candle in a dark room, he will perceive it encircled by a ring, which often displays all the colors of the rainbow, and in such a way that the outer side is greenish blue and the inner red. This symptom is tolerably constant, but is often caused by other affections, also. If palpation be employed, the affected eye will be found decidedly tenser than its healthy fellow. This is a very significant sign. It accompanies all forms of the disease; indeed, when it occurs during the course of any eye affection, it should always awaken suspicions of serious trouble, and arouse the observer to watchfulness. The patient is often troubled with neuralgic pains about the forehead and temples, radiating along the side of the nose. If the vision be carefully tested, a want of acuteness for excentric impressions, especially at the nasal side of the field, will usually be found. These symptoms may all recede, leaving the eye only slightly tense, and its accommodative power somewhat diminished. The patient's fears are allayed, and, unfortunately, too often his physician's, also. He ascribes it to a biliary derangement, or some temporary nervous condition; but be not deceived, the disease is not cured, this is simply a lull. These symptoms may recur again and again for months, or even years, before the attack of fully formed glaucoma is ushered in. Usually but a few months intervene between the time of the first attack until the disease becomes confirmed.

When, after the subsidence of these symptoms, the pupil does not regain its normal condition, or the acuteness of vision is lowered, we may expect that the outbreak of fully developed acute glaucoma is near. Then we have a repetition of these symptoms, but intensified. It is usually introduced by severe headache, the ball is abnormally hard, the visual field decidedly contracted, the acuteness of vision markedly diminished, the cornea somewhat anæsthetic, the aqueous and vitreous humors muddied, a deep vascular zone around the cornea, formed by engorged ciliary vessels. The lids may be swollen, the conjunctival and subconjunctival tissues inflamed and puffed out by serum. The later appearances frequently mislead the physician, and he concludes that he has a case of conjunctivitis. Indeed, it is quite common for patients to present themselves who have been treated from time to time for this with the usual astringent lotions, and an examination reveals the fact that they have glaucoma, and what is still worse, often so far advanced that blindness is inevitable. A careful examination of the anterior chamber will usually show that the distance between the anterior plane of the iris and the membrane of Descernet is diminished. If the nucleus of the lens has undergone the senile change, you may get the green reflection which the older writers lay so much stress upon. If the media be sufficiently clear to allow an ophthalmoscopic examination, you will find the retinal veins dilated and tortuous, and here and there pulsating; the arteries diminished in calibre, and easily made to pulsate upon slight pressure of the ball; the optic disk somewhat redder than normal. If the pressure from the hypersecreted fluids has been kept up sufficiently long, the optic nerve will be cupped. This peculiar cupping is always positive proof of the existence of glaucoma, and whenever found removes all doubts concerning the nature of the affection, no matter how meagre and uncertain the other symptoms may be. It must not be confounded with the physiological cup, which portends no harm, or the cup which often accompanies atrophy. It frequently happens that after a few remissions the inflammatory symptoms all subside, leaving the vision but little impaired, but they will recur again from time to time until the sight is completely destroyed.

I desire to impress you with the importance of not being deceived by the intermissions of this affection. You must expect it to return, and if let alone to run its course and produce irremediable organic changes in the eye, as confidently as you expect another paroxysm of intermittent fever after a well marked intermission. Always when you have diagnosticated glaucoma, or when you suspect its presence, watch carefully from time to time the acuteness of vision and the extent of the visual field. Sometimes it passes quietly into chronic inflammatory glaucoma, and you will have only occasional slight inflammatory attacks. It may progress insidiously without any further inflammatory manifestations. But the disease is doing its work just as steadily; the degenerative atrophy of the retina and optic nerve is none the less certain.

I have endeavored to give you a faithful picture of a well marked attack of acute inflammatory glaucoma. But the disease manifests itself, as before stated, in other forms. You may have the sub-acute variety, then all these symptoms are less intensified; or the disease may do its work so rapidly that even quantitative perception of light may be lost within a few hours after the attack, or the disease may be unaccompanied by inflammatory symptoms during its whole course. It has been known to blind one eye without the patient knowing that his eye was affected.

Time will not allow more to be said about these various forms. They all terminate in the destruction of the sight. Though primary glaucoma rarely affects both eyes at the same time, when it has once made its appearance in the one, we may regard its attack in the other as simply a question of time, and the patient should always be warned of this propensity. The practical fact that glaucoma frequently arises during the course of other eye affections, should never be forgotten. Von Graefe thinks there is scarcely any inflammatory disease of this organ which may not give rise to it. Hemorrhagic affections of the retina, iritis, traumatic cataract, keratitis, are the diseases during the course of which we most frequently meet with the complication. Much which is essential and practical must be passed over in silence, and now comes the question which is always the ultimatum of medical research, viz: "What can be done in a remedial way?" The answer is contained in a single word—iridectomize—always remembering that in order to obtain the full benefit of the operation, it should be performed before extensive structural changes have taken place. The most propitious time is during the premonitory stage, when we have every reason to suspect that the attack of fully formed glaucoma is near, or immediately after its outbreak. Take out a large section of the iris, close to the ciliary processes, enter the knife in the scleral tissue, just posterior to the periphery of the cornea. The observation of these points is essential, to derive permanent benefit from the operation. The exact time at which the operation is justifiable, in each individual case, must be left to the judgment of the physician. Previous to this time, the remedies usually employed for allaying pain and inflammatory excitement, will be proper. The treatment relied upon before iridectomy came in vogue was opium, mercury, cupping, etc. An abundant experience has demonstrated that these measures will fail, and the patient's sight be destroyed. If we depend upon them, we only lose valuable time. With these facts before us, we should be derelict of duty if we fail to resort early and promptly to the knife.

A CASE OF PARALYSIS.

Reported to the Southern Michigan Medical Society, by J. W. Steward, M. D., Wheatland, Mich.

Mrs. B., aged fifty, has been twice married, and is now living with her second husband, a farmer by occupation. She had enjoyed excellent health until about four years ago, when she suffered from an attack of paralysis, which, as she describes it, came on suddenly, and pervaded the entire trunk and limbs, causing sense of numbness, with partial loss of power in the lower extremities; all of which symptoms yielded to medical treatment in a few months, and she enjoyed tolerable health until the present season.

Some time last August she began to experience a feeling of numbness in the left hip, which soon affected the entire limb, which limb in a few weeks lost almost entirely the power of motion, and she was forced to use a crutch to enable her to get about the house and attend to her work. The difficulty, however, increased, so that in a short time she was obliged to suspend work, and take to her couch.

I saw her first on the ninth of November last; found her in bed and unable to walk, or even support her weight on her feet; her appetite and digestion were passably good; bowels constipated; circulation and temperature normal; slight derangement in the biliary and urinary secretions. She was suffering but little pain, but experienced a vague sense of uneasiness and discomfort, which she described as amounting at times almost to distraction. When she remained long in one position, as during sleep, the muscles of the lower extremities became sometimes rigid, which would disappear in a short time if the limbs were rubbed or moved by the nurse. The disease had now reached the right lower extremity, the lower half of the body, and both upper extremities. She retained the power of motion in all except the left lower limb, of which she had but very little use, and in which the sense of feeling was nearly suspended. The patient had lost some flesh, but was not very much emaciated. She had been regular in her menstrual periods until three months ago, when they were suspended, and have not again returned. In evacuating the bladder or bowels, she experiences a difficulty in making the effort. The symptoms manifested a regular gradation of intensity—first the left leg, then the right; then the left arm, and lastly the right, which is but very little affected. In the arms, the partial loss of sensation is principally on the ulnar side. I found some tenderness on the left side of the spinous process of the last dorsal vertebra.

I commenced the treatment by small doses of mercurialized chalk, three times a day, for several days; then gave diuretics until urine became natural. After the first week I administered precipitated carbonate of iron with macrotine, and commenced the use of the battery. The iron and macrotine were continued two weeks; the battery has been used every day, or every other day, until the present time. After discontinuing the iron and macrotine, I gave thirty drops of fluid extract of ergot three times a day, for two weeks.

Previously to my taking the case, the patient had been gradually growing worse. Since that time there has been some, but not very marked, improvement. The sensation and power of motion in the limbs have improved somewhat. In using the battery, I found electro-muscular sensibility and excitability to be almost perfect in all parts, except the left lower limb and the lower half of the left side of the body. Although the patient declared that she had no power to move this limb, and that she could not feel when it was handled or moved even quite roughly, yet when I pressed the point of a pin against the limb with but little force, and unbeknown to the patient, the limb was withdrawn from the offending point with considerable force; yet she declared that she was not conscious of being pricked or of making any motion.

This last circumstance excited a slight suspicion of malingering, although the patient, as I supposed, was above suspicion. I must confess that, in making out my diagnosis of the case, I was somewhat embarrassed.

Was this a case of paraplegia, or double hemiplegia, depending upon some structural change in the spinal cord, for the cerebral functions (as I forgot to state) were in no ways disturbed? Was it a case of progressive general paralysis, having its origin in some functional derangement of the spinal cord? Or was it hysteria occurring at this critical period of female life, and drawing all the capricious symptoms in its train?

I have presented the above case, thinking it might possess sufficient interest to draw out an expression of opinion from some of the members of the profession present.

Original Translations.

GLEANINGS FROM FOREIGN JOURNALS.

Translated for the REVIEW by J. H. Carstens, M. D.

Koumys and its Therapeutic Position. (*By Landowski, Revue de Sciences Medicales.*)

After having given a history of the question, after having given the mode of preparation of koumys, which by the Tartars is made exclusively of the milk of mares, and with us is a mixture of cows' milk and that of the ass, after having given the physical properties, the chemical composition and histology, the author (*Journal de Therapeutique*) explains the good effects of the medicament by:

1. The action of a large quantity of salt, identical with the salts of the blood's serum, introduced into the organism.
2. The action of albuminous matter on the organic tissues.
3. The action, eminently digestive, of the lactic acid.
4. The stimulating action of the alcohol and its influence on the adipose tissue in general.
5. The stimulant property of carbonic acid on the capillaries, and sedative on the mucous membrane of the stomach.

6. The permanent state of fermentation of koumys, which must be considered the principal cause of its direct and rapid action.

Koumys has been used in cases of pulmonary tuberculosis. By its influence sleep reäppears, the fever calms itself, the pulse moderates, the cough lessens, the expectorations change from a mucopurulent to a mucous, the appetite is much improved and the weight is increased. Of one hundred tuberculous patients treated in that manner by Bogoialewski, fifteen were cured, seventy were notably ameliorated, ten with negative results, and five died. Of forty cases observed by Landowski, he had good results in thirty.

Koumys has also been employed in albuminuria, diabetes, chlorosis, anæmia, gastritis and dyspepsia.

The minimum duration of treatment is six weeks; the quantity used varies from one to four bottles a day. Of the two kinds of koumys employed no difference exists except in degree of fermentation. Of that manufactured at Paris, No. 1 contains 22.530 of alcohol per litre, while No. 2 contains 30.130. One makes use of the latter in cases of gastric complication, such as vomiting, diarrhœa, etc.

The Treatment of Tuberculosis. (By Dr. Steinbrueck, Wiener Med. Chirurgische Rundschau.)

In Neuragoczi, near Halle, O. S., the author (*Allgm. Med. Central. Zeit., 1875*) was able to get nitrogen of 98.8 per cent, and free it by means of potash solution from the carbonic acid. This nitrogen passes freely from the mineral wells of that city. The author keeps the gas in glass vessels which contain one hundred and fifty cubic feet of the same. He tried the inhalation of nitrogen on several hundred patients.

The action of the gas is, according to Steinbrueck, that the patient is forced, on account of the lack of oxygen, to take deeper inspiration. By means of this in the first place irritating and adhering mucous plugs are coughed up. and secondly by this means heretofore inactive parts of the lungs are brought into activity and forced to respiration. Furthermore, the pulse is lessened from ten to twelve beats; the number of respirations is lessened; the irritated nervous system is quieted; the increased cutaneous exhalations, sweats, and increased urea and uric acid secretions are diminished. The desire for food increases; the strength, the lungs' capacity and the body-weight increase. By means of nitrogen inhalation, a venous discrasia of the blood is brought about that is antagonistic to tuberculosis, as this is shown in cases with goitre, heart disease or in pregnancy.

CONDENSED FROM ANNALES DE GYNÆCOLOGIE, FOR NOVEMBER 1875.

Translated by Dr. E. W. Jenks.

Supernumerary Breast.

The *Bordeaux Medical* reports that Dr. Calvy observed in the Hotel Dieu, of Toulon, a woman 27 years of age possessing a supernumerary breast which four days after her confinement secreted milk.

Vomiting of Pregnancy.

Prof. Pitois, of the School of Medicine, of Remuer, has employed hyoscyamine with success in the treatment of incoercible vomiting of pregnancy, and reports two remarkable cases where it was efficacious after all other pharmaceutical means in usage had failed.

The use of Iodoform in Vaginismus.

M. Tarnier has employed this remedy with a degree of success, and relates one case in illustration, of a woman 32 years of age, who since her marriage at the age of 17 had been affected with an extreme hyperæsthesia of the vulva. This woman complained of severe pain in walking, while sexual intercourse was a veritable torment. There was no lesion to be found about the vulva or the neck of the uterus. The simple contact of a probe upon either of the labia minora caused her to utter cries of pain. She had not borne children but had aborted once at the age of 17. M. Tarnier sprinkled the vulvar orifice and labia minora with the powdered iodoform. Some hours after, these localities were rendered insensible. During the succeeding ten days there was an absence of pain in walking, and coition was rendered tolerable. The dressing was again repeated with similar results. M. Tarnier thinks a continuation of this treatment will cause an entire disappearance of the painful phenomena.

Reports of Societies.

DETROIT ACADEMY OF MEDICINE.

DETROIT, December 9, 1875.

THE society met at the office of Dr. Inglis, the president in the chair.

Dr. LUNDY, of this city, and Dr. CHAMBERLAIN, of Grand Rapids, were introduced to the society.

Dr. **McGraw** exhibited a man, thirty-eight years of age, with an enlarged left testicle which was diagnosed encephaloid. There was no hereditary tendency. The first appreciable enlargement noticed was in March, 1875, and it has been tapped twice since. On measurement, the tumor was eleven inches in circumference transversely, and thirteen inches longitudinally. There have been quite sharp pains at intervals. The doctor intended to make an exploratory examination, and, if the diagnosis was confirmed, would remove the testicle.

Dr. **McGraw** also made mention of a case of congenital tumor, situated between the eyes, in a little girl six years of age, which he thought had its origin from the ethmoidal cells. This same case had been diagnosed at Breslau as hernia of the brain.

Dr. **Inglis** read an exceedingly interesting paper on "The Various Modes of Generation, especially Parthenogenesis," which was discussed by several members of the academy.

Dr. **La Ferte** presented the trachea removed from a child who had died of croup. Had treated the patient with a mixture of alum and syrup; also gave stimulants; also kept the temperature at eighty degrees, and moist.

The doctor also related another case in this connection, where he put the patient upon antimony and ipecac, and it become nauseated and occasionally vomited. The trachea became full of lymph, and he ordered oxygen gas, when the patient went into a comfortable doze. There were no patches on the fauces; the difficulty commenced evidently as laryngitis. The patient made a good recovery.

Dr. **Carstens** recommended in these cases quinine and the sub-sulphate of mercury, in two or three grain doses, until vomiting was produced.

Dr. **Shurly** favored the use of quinia. He regarded the diagnosis of membranous croup as not easy; also that membranous laryngitis was distinct from diphtheritic, the latter a fatal disease; kept the temperature at ninety degrees, and constantly generated steam by an atomizer; used bi-carbonate of soda; did not think it advisable to constantly nauseate the patient, but only occasionally.

Dr. **Duffield** used the turpeth mineral, and a mild use of ipecac; also gave a sharp cathartic of calomel, followed by arsenic.

Dr. **Noyes** also advocated the use of the turpeth mineral, and that the treatment of patient depended upon the general condition.

In answer to Dr. Inglis's inquiry in regard to the use of the atomizer, Dr. Shurly said that he did not use it in close proximity to the patient, but kept the instrument at some distance until the patient became accustomed to its use.

Dr. **Gilbert** did not deprecate the use of antimony, but the child should not be kept too much under its influence; he had seen only three cases of genuine croup.

Dr. Jenks related a case of croup in a child who, through mistake, had taken an over-dose of opium, and an emetic of mustard was given for its relief. In a very short time after this, the child was taken with croup.

Dr. Connor remarked that either croup or diphtheria may produce paralysis of the laryngeal or other muscles. Possibly the good effect of emetics are largely due to their irritating the pneumogastric nerves, and so continuing the action of the respiratory movements of the glottis long after they otherwise would have ceased.

Dr. Shurly thought that Dr. Jenks's case was œdema of the glottis, produced by the irritation of the mustard.

Dr. Andrews related a case where the symptoms were markedly those of variola, the eruption appearing within twelve hours, having at that time the appearance of a case of three days' duration. The eruption first made its appearance on the chest and face. Had this case occurred during an epidemic of small-pox, he should have at once pronounced it as such, but was in doubt as there was no small-pox in the city at this time, and asked for the opinion of the members.

Dr. Spalding had recently two such cases with similar symptoms, and he had come to the conclusion that they were cases of erythema marginata.

Dr. Brown also stated that he had seen similar cases to those mentioned by Drs. Andrews and Spalding.

Dr. Shurly made the following report of a case of Mennier's disease: N. C——, aged thirty-five, Canadian, well built, farmer and merchant by occupation, uses tobacco very much, and is said to have been wild in his earlier years of manhood. His left ear has been deaf for twenty years or more, but his right ear had retained its function until about three years ago, when it became impaired for awhile, but soon, however, regained its function; which again became partially lost a few months subsequently, and grew progressively worse, until now he can hear but little, and that little mostly through the left ear, which has slightly regained its lost function. About two years ago vertigo came on, which has been progressively worse, until he is completely unfitted for any business. He is seized suddenly with a vertigo, on account of which he must lay hold on something to steady himself. This vertigo inclines his head from before backwards. It comes without premonition, but he has fallen but once up to this writing, when he suddenly reeled on his side, showing a rotary motion, not losing consciousness. Nausea follows immediately every attack of vertigo. He has a voracious appetite, and but little dyspepsia, although treated for it; appearance of tympanum thick; no lesion of external ear.

Adjourned.

DETROIT, December 23, 1875.

The society met at the office of Dr. Inglis, with Dr. Gilbert in the chair.

Dr. **BARRY**, of Edinburgh, Scotland, was introduced to the Society

Dr. **MUNSON** exhibited to the academy a patient four months of age with double ranula, being congenital.

Dr. **SPAULDING** read an interesting paper upon the subject of inherited proclivities.

Dr. **SHURLY** stated that he was a believer in acquired mental proclivities, and that monstrosities might occur under accidental presentiment.

Dr. **CONNOR** remarked that it was a well known fact that excessive brain workers rarely transmitted to their offspring their large intellectual powers. This he attributed to the overwork of the brain at the expense of the other parts of the body.

The doctor also believed that certain peculiarities at the time of impregnation, both in the father and mother, might be transmitted. It would be wise, if possible, to prevent the marriage of consumptive and scrofulous people. Were this done, these diseases, to a great extent, would be eradicated.

Dr. **JENKS** believed in the hereditary tendency of both vice and virtue, but did not think that we could shift our moral responsibility in this matter. We are responsible beings, notwithstanding that we do inherit vice, and that the condition of parents at the time of conception leaves its marks. He thought that the deterioration of American women was due in a great measure to hereditary influence. He believed that in particular the great antipathy to having children, and the means used to prevent the same, had its influence, entailing upon their offspring not only the same idea, but carrying with it a deterioration of constitution. The doctor also was of the opinion that we should attempt to cure consumptives and scrofulous persons, as it is an impossibility to prevent marriages among them, and it is a well known fact that persons of this class are very prolific.

He related a case where a child, the result of an impregnation by the father in a state of intoxication, was born, and when it began to walk, had a shambling gait, which continued to remain. This result he attributed to the manner in which the father came home, and the impression upon the mother.

Dr. **NOYES** was not prepared to say how far this matter of hereditary tendency could be carried. We are not responsible for what we inherit, but we are responsible to a great degree for the results of this inheritance.

Dr. **CARSTENS** related a case where a daughter took care of a father after having an operation for cataract, and fifteen months afterwards gave birth to a child with a mark on the eye similar to the result of an operation for iridectomy. He also stated that offspring were better prepared to resist when they were aware of an hereditary taint.

Dr. **Munson** agreed with the other members in their opinions, but that marriage should be prevented between parties that were suffering with constitutional disease.

Dr. **Andrews** spoke of the influence of the mind of the female upon the offspring, as the dread which women had of horrid objects, which is common to all women, fearing that it might be transmitted. He could not wholly endorse the views of those who would prohibit marriage entirely for persons inheriting scrofulous tendencies, or even those who might possibly have an inherited tendency, as yet latent, to insanity. The offspring of such parents frequently developed mental and moral traits that more than compensated for their physical deficiencies. He believed that by a wise selection of partners in such cases—and instinct or "natural affinity," as it is called, is here often blindly wise—these tendencies to disease may be bred out of our race by degrees.

The evils of celibacy, both to the individual and to the race, are often greater than any that can flow from marriage.

Dr. **Inglis** made mention of the inherited proclivities in criminals as of political importance, as they were a class of people that were pretty generally cut off from society, and the great in and in breeding must necessarily produce criminals. He thought that the State should take this matter in hand and care for their offspring.

Dr. **Carstens** regarded genius as a species of insanity.

Dr. **Connor** spoke of the mother of the boy (criminal) Pomeroy, she being in the habit of visiting slaughter houses, and enjoying the killing of animals, before and while she was carrying the child.

We would have a more perfect offspring if every part of the parent was equally developed, and not at the expense of the nervous system. The best progress of the race depended upon its proportionate development. One cause of the death of races is the growth of one part of the body at the expense of another.

Dr. **Cleland** exhibited a molar tooth with an enormous incrustation of tartar.

Dr. **Carstens** reported measles as being prevalent, and also three cases of varioloid.

Dr. **Connor** thought the Board of Health could be of inestimable service to the people by instructing them respecting the dangers of public funerals of those dying of small-pox, scarlatina, etc.

No further business, the Society adjourned.

H. O. WALKER, *Secretary.*

MINUTES OF THE SOUTHERN MICHIGAN MEDICAL ASSOCIATION.

THIS association held its semi-annual meeting at the court house in Hillsdale, December 14, 1875.

The newly elected president, Dr. I. S. Hamilton, of Tecumseh, called the association to order, and introduced Rev. Mr. Rice, of Hillsdale, who opened the meeting with prayer, after which the president made a brief inaugural address. He mentioned the changes in practice and convenience for practice in southern Michigan that had occurred within the memory of many members of the association. "The city where we are now assembled was but a few years ago the camping ground of the red man, and is now the home of the statesman and the scholar. The practitioner of forty years ago, when all about us was unbroken wilderness, endured privations unknown with our present advantages for study, and our modern appliances for relieving the sick and wounded. Fractures, hernias and obstetrics, made the same demands upon his skill as at present. To-day, how changed! Our university and schools of learning challenge the world's admiration and respect. Our profession has pushed investigation in every direction. The routine of forty years ago has been revolutionized; our practice stands on another and more truthful basis, and yet there never was a time in the history of medicine when the student had more to do than he has to-day."

Reading of minutes of last meeting was dispensed with, on the ground that they had been published in full and circulated among the members. Forty members answered to the roll.

On motion of Dr. Beech, the regular order of business was waived, and the society proceeded to the transaction of "New Business."

Dr. **WHELAN** asked what shall be done with those members who have taken up their residence outside the geographical limits of the society, and are consequently unable to attend its meetings and receive its benefits? On motion of Dr. Cressy, a committee of three (Drs. Cressy, Beech and Whelan) were appointed by the chair to make the necessary arrangements, and report at its earliest convenience.

Dr. **BEECH** made known to the association the death of Prof. James H. Armsby, of Albany Medical College. Dr. Hamilton and others spoke of the great usefulness the late professor had been to science, and the loss the profession had sustained in his death. Upon appointment, Drs. Whelan, Cressy and Beech drafted the following resolutions, which were adopted by the association:

WHEREAS, This association has been informed of the sudden demise of Prof. James H. Armsby, of Albany Medical College:

Resolved, That we recognize in this melancholy dispensation a severe affliction upon the Union University, and an irreparable loss to medicine and its collateral sciences.

The regular "order of business" was now taken up, and Drs. Beech, Southworth and Wood, appointed committee on credentials. While this committee were auditing proposals for membership, Dr. Stewart read a report of a case of paralysis. His paper was attentively listened to, and ordered to be filed with the secretary and published. (Published in REVIEW.)

At 12 o'clock the association adjourned until 1:30 P. M.

At the appointed hour the association commenced the afternoon session by hearing the report of the committee on credentials, who reported favorably upon the names of the following gentlemen as candidates for membership in the association, who were elected in due form: G. Henry Chapman, of Hudson; George Chapman, Hudson; Louis H. Wurtz, Albion; Amos Crosby, Albion.

The secretary read a letter from Dr. W. W. Jones, president of the Ohio State Medical Society, presenting his views of "Homeopathy in the University." This letter elicited considerable discussion, and was finally disposed of by the association voting that it be filed with the secretary.

Dr. BEECH offered the following resolutions, which were read and adopted separately:

1. *Resolved*, That this association condemn the legislative action shown in the introduction of homeopathic chairs of medicine into the University of Michigan.
2. *Resolved*, That this association has entire confidence in the professional integrity of the regular faculty of the university; that we approve of their determination to stand at their posts, and fully sympathize with them in their efforts to maintain legitimate medicine.

The committee appointed to define the relations to the association of those members who have moved from the geographical limits of the society, presented the following article for addition to the by-laws:

ARTICLE XI.—Any member of this association having removed from the geographical limits of the society, shall, on application to the president and secretary, receive a certificate of his standing at the time of such removal; and it shall be the duty of the secretary, whenever any such removal shall be reported to him upon authority believed by him to be good, to make a record of the fact, with the time, or at least the year of removal, upon the register of the association, so that the reading of such names may be dispensed with.

In conformity with the specifications of article nine of the by-laws, the report of this committee was laid over until next meeting.

On motion of Dr. Stoddard, the association

Resolved, That the treasurer be authorized to pay for the publication of the minutes of last meeting, and that the secretary be authorized to secure a like publication in future.

On motion of Dr. Whelan, it was

Resolved, That the secretary of this association is hereby instructed to procure the printing of circulars to notify members in arrears for dues, and that he send to delinquent members requesting the remittance of the same.

Dr. CURRY read a paper on "Glaucoma, or the green cataract of the ancients." (Published in REVIEW.) The doctor received the thanks of the society for his able and instructive paper, and the request that it be filed for publication.

Dr. BEECH, of Coldwater, after the society had been entertained by a lengthy discussion of the homeopathic question, read an interesting humorous poem, entitled "What is Malaria?" which he very pointedly prefaced with the remark that it might prove counter-irritant to homeopathic difficulties.

Dr. SMART, of Hudson, read a paper entitled "Ergot—its physiological and therapeutical action." (Published in REVIEW.)

The association now adjourned until 7 P. M.

The evening session commenced by the appointment of Drs. Clisbe, Stoddard and Cutter, as a committee to decide upon the place for holding the next meeting of the association. Albion was the place fixed upon.

Dr. SOUTHWORTH, of Monroe, read a paper upon the "Condition of the Capillary Blood-vessels in Inflammation." (Published in the REVIEW.)

The association now listened to several verbal reports of cases, which were discussed *a la conversazione.*

Dr. HAMILTON, of Tecumseh, said that some time ago he was called to see a lady who had been in labor for four days; had at first been in the hands of an eclectic doctor, but a short time previous to my seeing her a regular physician had been in charge. She was very weak, and I could at first see no cause for the delay except inefficient pains, and desired to use the forceps. The doctor applied them, and asked me to take hold, as he could make no impression. I did so, but was also unable to effect delivery. Introduced my finger into the rectum, and found that it entered a *cul de sac;* continued my examination, and found a tumor pressing down before the head, and at once suspected the presence of a prolapsed ovarian tumor. We sought other counsel, and advised evacuation of the tumor by the trochar, but counsel thought it not advisable, so we performed craniotomy and delivered the patient, who remarked that she had been aware of the existence of the tumor for some time. She died of peritonitis, and the autopsy revealed an ovarian cyst on the left side.

Dr. WHELAN asked if the child could not have been delivered by turning.

Dr. WOOD said that he would have punctured the tumor in preference to attempting version.

Dr. BEECH spoke of the great impropriety of allowing incompetent practitioners to alternately rest and torture these cases by the use of first morphine and then ergot. The loss of time is irreparable; earlier in the case, before the strength of the patient had been wasted, version, in the hands of a discreet practitioner, might have effected the birth of the child and saved the mother. By placing the mother in knee-elbow position, the tumor might have been pushed aside; puncture could have done no harm with advantages for drainage.

Dr. **Whelan** again spoke in favor of version—bringing down the feet, by the peculiar lateral pressure it would cause, must of necessity force the tumor aside.

Dr. **Rynd** said that he was called by a homeopathic doctor, who came as messenger, to see a woman who had been in labor twenty-four hours. Found, on arriving at the bedside, that the shoulder presented; introduced his hand, and found the uterus ruptured to the extent of four or five inches; performed version, and delivered dead child and placentæ. Patient died thirty-six hours later.

Dr. **Cutter** asked if ergot had been administered, and was answered that it had been by the homeopath.

Dr. **Rynd** thinks the rupture occurred about twelve hours after labor commenced.

Dr. **Cutter** said that some years ago he was called to see a lady who was traveling with a Dr. Woodward, claiming to be from Adrian. Her case had aroused the suspicions of the ladies at the hotel where she was stopping, and they called me in. Found she had been delivered of a five months' fœtus, and was of the opinion that the abortion had been provoked by the use of ergot. The patient died, and post-mortem revealed rupture of the uterus.

Dr. **Alger** remarked that in this case fully one-third of the posterior uterine wall was ruptured.

Dr. **Whelan** hoped that he would never have a case of rupture of the uterus; in case of such an event, thought he would have no hesitation in making the Cæsarean operation, because of the advantages it would afford for drainage.

Dr. **Bowen** asked how much time was consumed in performing version in Dr. Rynd's case of rupture of uterus. Answer—about five minutes.

Dr. **Cutter** inquired of Dr. Whelan what advantages he would claim for Cæsarean section, when turning could be done so easily. Answer—drainage, which could not exist without an external opening.

Dr. **Smart** thought ergot would be of use after rupture of uterus, by causing perfect closure of the wound through contraction; would use it hypodermically over hypogastrium.

Dr. **Rynd** spoke of the relations of physicians to individuals who suffer criminal abortions—How far are we justified in extending professional aid and maintaining secrecy?

Dr. **Hamilton** referred the speaker to Dr. Stoddard's paper on the subject published in report of last meeting of the Association.

Dr. **Stoddard** spoke of efforts being put forth by the Board of Health to restrict and prevent this unnatural slaughter of the innocents by fœticide.

Dr. **Alger** said that in some of our villages married ladies were in the habit of visiting certain offices monthly, for the purpose of having these matters looked after.

Dr. CUTTER spoke of the use of what he called inorganic remedies; iron, lime, phosphorus do never become parts of the living body. Will present his views on this matter in paper at the next meeting.

Dr. RYND said that at our next meeting he would give his views upon the "Causes of Death in Public Men—Apoplexy, Paralysis, etc."

Dr. A. R. SMART said that he would also read a paper at the next meeting, upon the "Relations of Changes in Vascular System to Diseases of the Kidneys."

Drs. Beech, Everet and Minchen, were appointed a committee to select the names of nine members of the association as delegates to the meeting of the American Medical Association, at Philadelphia. The following gentlemen were selected: Charles Rynd, Adrian; George H. Green, Burlington; H. D. Wood, Angola, Ind.; C. T. Southworth, Monroe; J. P. Stoddard, Albion; A. Cressy, Hillsdale; J. H. Curry, Toledo; J. L. Haggerty, Crooked Creek, Ind.; I. S. Hamilton, Tecumseh.

The president and secretary were authorized to receive the names of all delegates who may find themselves unable to be present at the meeting of the American Association, and to appoint delegates in their places.

At 10 o'clock P. M. the association adjourned, to meet at Albion at 10 o'clock A. M. on the second Tuesday of July, 1876.

HAL C. WYMAN, M. D., *Secretary.*

PROCEEDINGS OF THE MICHIGAN STATE BOARD OF HEALTH, AT ITS MEETING ON JANUARY 11, 1876.

Reported by Dr. H. B. Baker, Secretary.

THE first quarterly meeting for 1876, of the State Board of Health was held at Lansing, January 11. There were present Dr. Homer O. Hitchcock, President; Rev. C. H. Brigham, Dr. H. F. Lyster, Rev. J. S. Goodman, Dr. A. Hazlewood, and Dr. Henry B. Baker, Secretary.

Dr. KEDZIE was necessarily absent on business for the State Board of Agriculture.

Rev. Mr. GOODMAN reported having attended, as a representative of the Board, the meeting of the Michigan Teachers' Association, at Grand Rapids, where he had read a paper on "School Hygiene." He also reported, as committee to investigate the sanitary condition of the common schools, that the work had not yet been completed, and on motion the amount voted for that purpose in 1875 was extended to 1876.

The president reported having attended, for the Board, the meeting of the American Public Health Association, at Baltimore, in November, last; that the meeting was well attended and many of the papers were of considerable interest. "So many and so lengthy were the papers that scarcely any time was given to discussion of the various subjects of interest which had been named by the Executive Committee."

On recommendation of the president, it was voted that Dr. E. H. VanDeusen, medical superintendent asylum for insane, at Kalamazoo, be invited to prepare a paper on "Mental Hygiene."

The secretary was directed to send the reports of the Board to the Centennial Exhibition. The secretary read his quarterly report of work done in the office since the last meeting. From this it appears that blanks for annual reports of local boards of health, and a circular of instructions, had been sent to the clerks of 1,184 boards throughout the State. Replies from 404 clerks had so far been received. These reports are each year becoming more numerous, complete end satisfactory. In October, a circular relative to water supply was published and sent to the correspondents of the board. Replies were received from thirty-six correspondents, of which twenty-five, or the number received up to November, are printed in the report for 1875. Among the publications of the office since the last meeting, are twenty-five thousand four-page pamphlets on "Treatment of the Drowned," for distribution to the school population, five thousand eight hundred circulars to school directors, five thousand eight hundred circulars to school teachers, also a circular to editors, which, together with a blank meterological register, and a circular on water supply, was sent to each of the two hundred and seventy periodicals published in Michigan. A circular relative to prevailing diseases was published and sent to correspondents. Replies are now being received. These replies are valuable, as were also those on water supply. It is believed that the board will receive much valuable aid in its work from these gratuitous efforts of its correspondents. By considerable effort and correspondence, reliable meteorological observers have been secured at ten stations within this State, and a few in other States. The observers in Michigan are: John Bell, M. D., Benton Harbor; Henry F. Thomas, M. D., Allegan; Lyman P. Alden, Coldwater; E. H. VanDeusen, M. D., Kalamazoo; Prof. J. Estabrook, Ypsilanti; H. T. Calkins, M. D., Fyfe Lake; J. H. Kellogg, M. D., Battle Creek; J. S. Reeves, M. D., East Tawas; C. Henri Leonard, M. D., Detroit; and R. C. Kedzie, M. D., Agricultural College, Lansing.

The printing of the annual report for 1875 has been nearly completed. The preparing of the illustrations and manuscript, and reading of the proof on this report, has formed part of the work of the office since the last meeting.

A communication from Dr. J. B. Hull, of Lansing, relative to the cause of chorea in the public schools, was read and referred to the committee on education, as related to health, and it was voted that Dr. Hull be requested to report more fully at some future time.

A communication from F. H. Seymour, statistician of the State Firemen's Association, offering to furnish statistics of the causes of fire in Michigan to the reports of the board, was read. The secretary was authorized to accept the same, subject to the same conditions as other matter furnished to the reports of the Board.

A communication from J. S. Reeves, M. D., of East Tawas, relative to the topography and sanitary condition of his locality, was read. It was voted that he be requested to make additional inquiries and report results to the board.

The secretary read several communications from persons in this State and in other States, bearing upon the inspection of illuminating oils. Considerable discussion ensued, and the secretary, who had his views written out, read them.

Mr. A. A. Day, State inspector of illuminating oils, appeared before the board and read a review of the custom of the trade as connected with the system of inspection, and a vindication of his course in inspecting oil at Cleveland.

The resolution offered by Dr. Baker was not adopted. After some discussion the following resolutions were adopted:

Resolved, That this board is in no way responsible for the manner in which the provisions of the law requiring the inspection of oils have been executed.

Resolved, That the almost entire absence of accidents from the use of dangerous oils in this State, during the past six months, emphatically justifies the position and efforts of this board in procuring an efficient inspection of oils.

Resolved, That the numerous complaints of bad oil sustaining the flash test of 140° F., now brought into this State, are in no way chargeable to the inspection or the required test, but to the efforts of manufacturers to make an inferior oil sustain our test by mixing with it oil containing paraffine.

Resolved, That a brand of oil free from paraffine, and bearing the Michigan test, should be demanded by all consumers.

DR. DAVID INGLIS has been appointed attending physician to Harper Hospital, and Dr. G. A. Foster attending surgeon. Drs. J. F. Noyes and A. G. Sinclair ophthalmic and aural surgeons in the same hospital. Since the hospital authorities have thus recognized specialties, are they not bound to recognize other departments as important as those of the eye and ear, such as gynæcology, diseases of throat and lungs, male genito-urinal organs, pathology, nervous diseases, electro-therapeutics, etc., etc.?

Correspondence.

*HOMEOPATHY IN MICHIGAN UNIVERSITY–VIEWS OF AN OLD AND PROMINENT PHYSICIAN OF TOLEDO, O

TOLEDO, O., December 13, 1875.

Hal C. Wyman, M. D., Secretary Southern Michigan Medical Society.

SIR—I had hoped to be present at your meeting to-morrow, but find that a press of professional engagements will make it impossible.

I regret this the more, for the reason that I think the profession should not let the opportunity pass to give expression to its views upon homeopathy in the University.

At the first view, it might be considered improper for a physician from another State to meddle with the internal policy which may have been adopted by the regents of the University; but when it is considered that your action and the public opinion which may be incidentally affected by your decision upon this subject, will be calculated to produce effects which have a bearing upon the interests not only of the profession of other States, but the welfare of the community all over the country, the question becomes of too vital a character to be confined to State lines or national boundaries.

So little is known of medicine by a majority of our people that imposition and quackery find easy victims, even the well educated and sincere are often found to lend a willing ear, and accept doctrines in medicine that shame the logical powers of a first-class school boy.

The history of medicine is full of accounts of the vagaries which have from time to time flourished and faded away, because they had no more foundation than the "baseless fabric of a dream."

I need not say to you that such is homeopathy, but to those who have not examined the subject, and who, by their education and opportunities for medical investigation, are not qualified to judge, and who are captivated by the "slight o' hand" tricks of these professional mountebanks, it becomes quite another matter.

It is because the physician should be true to his calling, true to the people who entrust their lives, their honor, their virtue and their reputation in his keeping, that we are hostile to sects in medicine which are founded in error, and kept up by the love of gain.

I know there are some who would, and do say, that we are hidebound and prejudiced, but could they see and know homeopa-

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*This letter will be of interest, as it apparently was the cause of a discussion on its subject matter, at the late meeting of the Southern Michigan Medical Society. *Vide* report in this issue of the REVIEW. The letter was laid on the table by the society, but subsequently obtained by its author, and sent us by request for publication.

thy as we see and know it, with its chicanery and nothingness, they would be compelled to admit the justness of our strictures.

We can never affiliate with any such sect, and the attempt on the part of any one to marry us to any such unnatural union must result in a failure.

We had hoped that the University of Michigan would have remained true to the interest of medical science. Many of us have treasured her diplomas as the evidence of true professional merit, knowing that her curriculum was equal to that of any in the world, and it is with feelings of sorrow that we contemplate the fact that her future diplomas in medicine must be tainted with charlatanism.

Rather than such a consummation, it would be better that its medical department be discontinued, and not be permitted to become a source of vain regret, not only to her own people, but to the profession of the whole country.

I trust our society will take such action upon this subject at this meeting, as will express the sentiments of the profession.

With best wishes for the society in endeavors to promote progress in medicine,

I am very truly,
Your obedient servant,
W. W. JONES.

HOMEOPATHY IN MICHIGAN UNIVERSITY—REMARKS BY PROF. C. L. FORD, M. D.

Messrs. Editors of Detroit Review of Medicine and Pharmacy:

It is with great reluctance that I differ from my former colleague and friend, but duty demands that I correct some errors, and I therefore ask space for a few words in reply to statements concerning myself, on page twenty-seven of the January issue of your Review, from which I make the following extracts:

> "The first meeting having been called at the instance of Drs. Ford and Douglass to induce the other members of the faculty to unite with them in making some concession to the homeopaths by which the school or college might be brought in connection with the University."

And again,

> "But as Dr. Ford had previously shown a warm interest in having the Homeopathic College brought to the University, and, as currently reported, has unequivocally expressed his approval of the act of the regents, he could with the greatest propriety be counted as present at the meeting and in harmony with its action."

On these extracts I offer a few remarks: I *did* request the meeting indicated. I *did not* request it for the purpose stated. I *did not* in any way say or do anything "to induce the other members of the faculty" to do what is alleged, nor did I desire to have it done, nor did I ever fail to do what I could to prevent it. I had *not* "previously shown a warm interest in having the

Homeopathic College brought to the University," but uniformly deprecated such a result.

Being absent from the State from March 22d to June 17th, 1875, I could *not* "with the greatest propriety be counted as present," at a meeting of which I had no knowledge whatever, and never heard till months after.

To approve or reprove the regents for their acts, is no part of my duty, and, as all their doings in reference to the matter in question were performed during my absence from the State, I had nothing to say or do about them, for I had previously said and done all that I felt could be of service in averting the act which every member of the faculty deplored, and which no one ever sought to have accomplished.

I ask, as an act of justice, that any who may copy the charges against me, will copy this brief reply.

C. L. FORD.

ANN ARBOR, Mich., January 15, 1876.

AN EXPLANATION FROM AN ALUMNUS OF MICHIGAN UNIVERSITY.

Editors Review:

The only excuse I have for trespassing upon your columns is the fact that I am gradually meeting with a change of mind, and desire an opportunity to rise and explain.

Twenty years ago I adorned one of the seats in the medical college at Ann Arbor, and answered to my name at roll-call with a degree of regularity that was truly surprising. It was there I took in medical knowledge by endosmosis, and nursed from the paps of my alma mater a hatred of homeopathy that has been the bane of my life ever since. And so I was extruded upon a breathing world, scarce half made up, and that so lame and unfashionable, that the homeopathic poodles barked at me as I halted by them.

There I was taught to believe that there was but *one* science of medicine, but *one* straight gate to the field of medical knowledge, and that all who climbed over some other way were thieves and robbers and asses. That the eclectics, hydropaths, red pepper people, *et hoc genus omne*, were but warts on the *corpus medicale*, and the homeopaths a sort of seven-year-itch, which it might be consoling to scratch, but in all probability would itch all the more in consequence. That, in the language of one of the late lamented faculty, "a man, in order to practice homeopathy, must be either a knave or a fool;" because if he believed the doctrine of Hahnemann he was a fool, and if he did not, and still practiced or pretended (as most of them were reported as doing) to practice it, he was a knàve. That all consorting with the unclean thing was striking hands with Belial, and pandering to a fraud so transparent that the wayfaring man, though a born idiot, could not be deceived thereby. That its originator was a dyspeptic, semi-educated, addle-brained old noodle, who, like some wide-mouthed homeopathic vials we see around us every day, failed as a "regular," and so used this to eke out a precarious subsistence. That to raise it to the dignity of debate was like pitting a lion against a skunk, with the prospect that the lion would be defeated from pathological causes. That the success of its advocates depended upon the gullibility of the public—a sort of unlimited copartnership, wherein one party agreed to be humbugged, and the other party to humbug them. That the attempt of the legislature to force it upon the regents was a stretch of authority, arising from an insane idea that a man would be twice armed who carried in addition to the regular medical rifle, which was always true to the mark, a homeopathic shot-gun barrel welded alongside, loaded with sugar pellets to bring down small game, such as children, delicate females, and the like, constituting a sort of double-barreled practitioner, as it were; and in consequence of which legislature was an ass. That it was a system that did splendidly when people were not sick, and that its strongest advocates were afraid to trust it in severe illness. That its practitioners were, with scarcely an exception, ignorant men; hence their anomalous position. Finally, that there was not an alleviating or palliating circumstance, thought or condition, which could in the slightest manner obviate the loathing and utter contempt in which the abomination was to be held.

This belief grew with my growth and strengthened with my strength, and seemed truer every day than it did the day previous, until the recent agitation of the subject brought about a change. Homeopathy has been of late so thoroughly discussed through the medical journals of the country, and the faculty statement shows so conclusively the marked difference "'twixt tweedle-dum and tweedle-dee," that I am convinced that we of the regular profession have been a little too harsh—have been too radically right, as it were—and that we should, in the light of recent developments, look with more leniency upon the deluded followers of a system which has much of—ah—truth about it, and many quite pleasing and somewhat—ah—instructive things, as you may say. We need not necessarily embrace the whole of the followers of that eccentric theory, but many of them are, after all, nice, pleasant fellows, and have considerable influence in society, you know. There is no necessity of being so very exclusive in our selection of medical associates, for homeopaths *will* exist, and we ought to try and educate them to a standard so high that they will lose sight of the attenuated dilutions, and all that which seems to us rather fanatical and—somewhat peculiar, you see.

Suppose, for argument's sake, that they are entirely in error—isn't it better to step down and lift them up, rather than try to kick them down when there is a possibility that in so doing we may kick them up? Suppose you do consider them effete matter from the medical body, isn't it a truism that the more you agitate such substances the more attention it attracts?

Then again, isn't it the height of presumption for individual practitioners throughout the State, to attempt to dictate and worry the medical martyrs who are now slowly burning at the University stake in Ann Arbor?

Can any man have the temerity to address words of reproof to any of the Hon. Board of Regents (which is acknowledged to be the worst bored board in the State) and charge them with nursing this bantling in order to secure provision for their legitimate offspring? And ought not the faculty to gently frown upon any person expressing an opinion adverse to their highly embarrassing and peculiar position in this connection? To be sure they had.

And now I am aware that my course in this unpleasantness will gradually alienate me from some of my most cherished friends among the Alumni, and the gap will perhaps widen until it will be impossible to "shake hands across the bloody chasm." Still I feel that I am right, and though I grieve over my misguided companions, I shall undoubtedly receive a higher remuneration in a variety of ways than they could possibly afford me. It pains me, however, to leave such men as Dr. Twiss, of Union City, with whom I had the honor of graduating, Dr. Lewis of this city, who is a gentleman "to the manor born," Dr. Topping, of Dewitt, who has traveled the same corduroys in Clinton county with myself for years, a gentleman who I used to think was peer to any physician in "highland or lowland, far or near," and hundreds of other whole-souled, honest but misguided men, who would sooner lose a hand than stoop to do a dishonorable action, who look upon charlatanism as they do upon horse-stealing, as a thing without any mitigating circumstances whatever, but the separation must come. I never can turn my back upon my Alma Mater. In other words, I must say, my Alma Mater, always right, but right or wrong, my Alma Mater. May my tongue forget its cunning, and my right hand cleave to the roof of my mouth if ever I forget her.

E. B. WARD.

JACKSON, January 19, 1876.

EDITORIAL RESPONSIBILITY.

ANN ARBOR, January 21, 1876.

Editors of the Detroit Review:

GENTLEMEN—Having received a few days since a letter from Dr. Maclean requesting a retraction of our statement in the January issue of the DETROIT REVIEW, that we thought the editorial in the December number of the *Peninsular Journal* was unmistakably from his pen, and wishing to do simple justice to that gentleman, we submit herewith our reasons for regarding him as the author of the aforesaid editorial, and for holding him responsible for its unfounded assertion.

1. We were shown, nearly two months since, the following statement over his own signature, viz: "Your logical and able letter to the *Peninsular Journal* has come into my possession, as *one of the editors of the journal.*" And again, "*We* have determined to increase its size with the January number," etc.

2. We have learned from another member of the editorial corps, indirectly but responsibly, that Dr. Maclean was the author of the editorial so complimentary to the faculty, which appeared in the November number of that periodical.

3. We find that the only portions of the editorial of the December issue which are of any importance to the profession, such as the letters of Drs. Gross and Octerlony, although somewhat stale, could have been contributed by no other person than Dr. Maclean.

That certain other unfounded and calumnious statements touching our relation to the joint action of the regents and faculty, asserting that, "Dr. Sager was on the ground and cognizant of all the facts known to other members of the faculty, *but without having made any protest or offered any suggestions, until long after all was completely accomplished,*" were, if not gratuitous fabrications of the avowed editor, in all probability communicated by the silent partner in the editorial staff.

Having shown, then, from his own confession, that he had assumed the joint responsibility for the editorial matter of the *Peninsular Journal*, we still justly hold Dr. Maclean responsible for its statements, even while admitting from his assertion alone that he did not pen the editorial in question.

Respectfully,
A. SAGER.

Condensations from our Exchanges.

PRACTICE OF MEDICINE AND THERAPEUTICS.

Modes of Dying and Available Treatment.—Dr. B. W. Richardson (*British Medical Journal*, November 13th, 1875) gives the modes of death as follows:

1. From degeneration of tissue—natural decay.
2. From structural degeneration, as of heart, cancer, lung, etc.
3. From cold—temperature twenty-eight degrees Fahrenheit.
4. From displacement of oxygen of blood, or prevention of its combination. This was caused by septinous products, and an experiment showed that vaccine lymph liberated oxygen from peroxide of hydrogen. Quinine would to some extent prevent this.
5. From loss of blood.

6. From cranial pressure, as in apoplexy. He had proved direct communication between the cerebral and iliac veins, by injecting mercury and also by lighting, at a tube in the cranial substance, gas injected into the ascending iliac vein.

7. From uræmia.

8. From shock—arterial spasm, accumulation of motor force. This occurred in narcosis from chloroform and other anæsthetics of the same series, probably from irritant action.

9. From arterio-paresis, as in congestions of the lung or kidney.

10. From muscular spasm—tetanus, colic.

11. From pectous change, as of blood and nerve tissue, as in croup, pneumonia, rheumatism and post-partum.

12. From true asphyxia.

The modes of treatment considered available: In 5, transfusion; in 6, 7, 8 and 9, bleeding; in 10, nitrite of amyl; in 11, the administration of liquor ammoniæ to saturation of blood, preserving the horizontal position; in 12, artificial respiration after tracheotomy by means of bellows.

HOURS OF DEATH.—Dr. Robert Lawson (*West-Riding Reports—Medical and Surgical Reporter*, December, 1875), from a careful study of this matter, concludes: "There are some hours which are associated with a great liability to death. In acute and chronic diseases, the maximum hours of death are widely different. In chronic diseases a very large proportion of deaths occur at a period which may be said to range through one hour before and one hour after nine o'clock A. M. Acute diseases are characterized by two periods of marked mortality—the first in the dead of night, the second in the afternoon.

EMETICS CLASSIFIED.—M. Grasset (*Archiv. Gen. de Med.—Edinburgh Medical Journal*, November, 1875) divides emetics according to their mode of action.

1. Peripheral emetics, which act by exciting the extremities of the pneumogastrics, as, for example, ipecacuanha.

2. Central emetics, which act by exciting the vomitive centre in the medulla oblongata, as, for example, apomorphia.

3. Mixed emetics, which act by simultaneously exciting the peripheric extremities of the pneumogastrics and the vomitive centre, as, for example, tartar emetic.

Emetics, besides inducing sickness, generally have a local irritant effect on the skin and mucous membrane; they modify respiration, circulation and temperature; they increase the secretions, and they diminish the excitability of the striated muscles.

PHYSIOLOGY.

ARCTIC COLD—ITS INFLUENCE ON MAN.—Lieut. Payer, in an account of his arctic explorations (*London Medical Record*, July 15, 1875), mentions the following effects of cold on man, at a temperature of 40° below zero (Reaumur): The will seems paralyzed; men are unsteady in gait; stammer; think very slowly, as if intoxicated; the thirst is intense, owing to the rapid evaporation from the body; both smell and taste become greatly enfeebled; strength gives way; the eyelids involuntarily close and become frozen; when locomotion stops, the sole of the foot becomes insensible; dark beards become lighter. The only possible protection against the cold is to be very warmly clothed.

GELSEMIA—ITS PHYSIOLOGICAL ACTION.—Dr. J. Ott (*Medical Times*, July 31st, 1875), from experiments on animals and cases of poisoning in man, concludes:

1. In cold-blooded animals, it paralyzes first the sensory ganglia, and then the motor ganglia, in the central nervous system. This order is reversed in warm-blooded animals.
2. It diminishes the pulse and pressure.
3. This decrease of pulse rate is due to lessened irritability of the excito-motor ganglia of the heart.
4. The fall of pressure is due to diminution of the cardiac irritability and vaso-motor tonus.
5. It decreases the respiration through a paralyzing action on the respiratory centres.
6. It dilates the pupil.
7. It reduces the temperature.

CHLORIDE OF IRON—ITS ACTION ON NUTRITION.—Rabuteau (*Centralblatt. f. Chirurgie—Medical Times*, September 11, 1875) reports a series of researches, carried out in his own person, relative to the effect of iron upon tissue change. Each series of experiments extended over fifteen days, during which he took the same sort of nourishment, exercise, etc. During the first five days the daily excretion was exactly determined. From the sixth to the tenth day, then two grains of chloride of iron were taken daily, the observations being continued, and during the last five days the estimation of iron excreted was included.

It appeared that the amount of urine was unchanged; its acidity was decidedly increased during the administration of the iron. This fact is sufficient to justify the use of ferruginous preparations in cases of phosphatic urine, lithiasis and oxaluria, and to place in a correct light the favorable results observed from the iron treatment in such cases. The amount of solids and the urea in the urine were increased ten per cent. It thus appears that the administration of chloride of iron, even in moderate doses, increases tissue change considerably. Pourouski had previously observed a rise in bodily temperature while taking iron.

OBSTETRICS.

LACERATIONS OF PERINEUM—CAUSES.—Dr. Wm. Goodell (*Medical Times*, November 13, 1875) gives these as follows:

1. Rigidity, dryness and congestion of the soft parts, as in first labors.
2. Absolute or relative disproportion between the size of the head or of the shoulders and that of the vulva. This also includes the presence of one forearm, or both, along with the shoulders.
3. Every cause, whether moral, anatomical or physiological, that precipitates the passage of the head through the soft parts, as, for instance, violent straining efforts through great nervous excitement, a small head, straight sacrum, or an overdose of ergot.
4. Faulty mechanism of labor, such as incomplete flexion or extension of the head, or an occiput rotating posteriorly.
5. Keeping the limbs straight and in close contact at the moment of the birth of the head.
6. Causes dependent upon the physician, such as the use of the forceps, a faulty method of supporting the perineum, or meddlesome midwifery.

DELIVERY OF A LIVING CHILD FROM A DEAD MOTHER.—Dr. Kelly (*American Journal of Obstetrics*, November, 1875) reports a case in which a woman died in labor from rupture of a thoracic aneurism. The os was rapidly dilated, and a living child delivered in about fifteen minutes after the death of its mother. The child has since done well. Cases have been reported in which live children were born half an hour after the death of the mother.

SURGERY.

New Galvanic Cautery Battery.—Dr. B. F. Dawson (*Medical Times*, November 27, 1875) has devised a galvanic cautery battery, intended to overcome the objections to those now in use. It is small in bulk, of great power and complete reliability. The external wooden box is eight inches high, five and a half inches long, and three and one-half wide. There are two glass cups, into each of which are introduced two zinc plates, with one of platinum between them. The cups hold one quart of the battery fluid, sufficient for constant action of half an hour without being changed. The peculiarity of this battery consists in two hard rubber pumps or agitators, in the shape of the letter T inverted, which pass down between the plates, and can be raised or lowered as often as desired, by means of a handle. To facilitate their action, the zinc plates are perforated by small holes, through which the fluid continually passes as it is displaced by the pumps. To temporarily suspend the action of the battery, there is an arrangement by which the plates can be raised out of the fluid. Platinum knives, which by ordinary batteries or by this battery when the pumps were not worked, could only be heated red-hot, became, the instant the pumps were set in motion, white-hot. These batteries are made by Tieman at a probable cost of forty to fifty dollars.

A New Method of Opening the Eustachian Tube and Ventilating the Tympanic Cavity.—Prof. Gruber (*Monatsschrift fur Ohrenheilkunde—London Medical Record*, December, 15, 1875) gives the following, which he regards as possessing some advantages over Politzer's and Lucæ's methods. For the passage of the air up the eustachian tube it is necessary that the structures effecting the closure of the pharyngeal space in other directions, will withstand a considerable amount of pressure. In Politzer's method this is done by the act of swallowing. He says that the simple pressure of the root of the tongue on the posterior segment of the palate, simultaneously with a forcible expiration, is enough. The closure of the pharyngeal space is effected in different degrees by the utterance of the syllables, hack, heck, hick, hock, huck, the closure being greater the later the expression stands in the series. The practical method of utilizing these facts is as follows: "The operator stands or sits as is most convenient, with the patient *vis-a-vis*. The end of the nozzle of the bag, which is held in the hand of the operator, is inserted one centimetre into the nostril of the patient. The operator now closes with the index and middle fingers of the other hand, the nostril upon the nozzle of the bag, and while the patient, at his command, pronounces one of the before mentioned syllables, the bag is forcibly squeezed, and the air is distinctly heard to pass into the tympanic cavity.

Chemistry and Pharmacy.

Transformation of Brucine into Strychnine.—M. Sonnenschein has discovered that brucine may be converted by the oxidizing action of nitric acid into strychnine, and that, on the other hand, strychnine may be converted into brucine by the prolonged action of alkalies at an elevated temperature. These facts have obvious bearings upon medico-legal investigations in which either of the alkaloids named is the object of search, although the two poisons are so nearly identical in their toxical properties that the confounding of one with the other could seldom interfere with the ends of justice.

HYDROCYANIC ACID.—It is generally believed that prussic acid cannot be detected in the body, if the examination be deferred many days. Sakoloff has recently shown the possibility of detecting it after an interval of twenty-two days (in dogs to which had been administered about half a grain of the anhydrous acid). The contents of the stomach were distilled with dilute sulphuric acid, the prussic acid, however, not passing over with the first portions of the distillate. This confirms the observation already made that hydrocyanic acid in the body becomes converted, during the process of putrefaction, into a double cyanide (sulphocyanide?), not readily decomposed by the stronger acids.

GLYCYRRHIZATE OF AMMONIA.—Under the above name, Mr. Wm. Arthur (*Druggists' Circular*, January, 1875) describes a soluble preparation which presents, in a concentrated form, the virtues of licorice root. The following is the process by which it is obtained:

℞.	Licorice root, bruised	℥xvi.
	Water of ammonia,	
	Cold water, aa	q. s.
	Sulphuric acid	℥iij.

Place the licorice root in a jar with a close fitting cover, pour upon it six pints of water and one fluid ounce of water of ammonia, and allow it to macerate forty-eight hours. Drain off the liquid, and wash the root with two pints of water. Mix the washings with the infusion; when the impurities have settled, decant, heat to boiling, and filter. To the filtrate add the acid slowly, and after forty-eight hours decant the fluid from the precipitated glycyrrhizin, wash it thoroughly, and dissolve in the smallest possible quantity of water of ammonia diluted with an equal bulk of water, and pour the syrupy liquid obtained upon plates of glass to dry. The product is in the form of thin amber-colored scales, readily soluble in water, and of an extremely sweet taste. The yield from a pound of good root is about one troy ounce.

A New General Antidote.—J. Jeaunel (*Annales de Hygiene*, April, 1875) recommends the following as an antidote which should be kept constantly prepared by druggists:

Persulphate of iron solution (density 1.45)	100	parts.
Water	800	"
Calcined magnesia	80	"
Animal charcoal	40	"

The iron solution should be kept in a separate bottle from the mixture of the other three substances, and should be added to it immediately before using.

This mixture acts as a perfect antidote to arsenic, and is preferable to the ferric hydrate, because the latter deteriorates upon keeping. It also acts as a perfect antidote for compounds of zinc and digitaline, and nearly so for those of copper. It delays considerably the action of salts of morphia and strychnia, and to a slight extent that of compounds of mercury. It has no virtue in counteracting the effect of cyanide of mercury, tartar emetic, hydrocyanic acid, phosphorus or the caustic alkalies.

A freshly prepared mixture of the sulphide of iron, magnesia and sulphate of sodium acts as a perfect antidote for salts of copper, corrosive sublimate and cyanide of mercury.—*Boston Medical and Surgical Journal.*

Artificial Preparation of Urea.—C. A. Bell (*Chemical News*) gives the following simple process for preparing urea artificially. Mix intimately four parts of perfectly dried and finely powdered potassium ferrocyanide with three parts of pulverized potassium bichromate. Place a small quantity of this mixture in a porcelain or iron dish, and heat until a tinder-like combustion takes place and the mixture blackens. Add the remainder of the mixture in small successive portions, allowing each to become completely blackened before adding the next. The operation is completed in a few minutes, and results in the formation of a quantity of potassium cyanate, which is easily extracted from the porous carbonaceous residue by boiling alcohol.

It is not necessary, however, to be at the trouble of separating the cyanate, if the preparation of urea is our ultimate object. We may extract the black residue simply with very cold water, filter the solution, and add cautiously barium nitrate as long as a precipitate (barium chromate) is formed; filter once more, and add to the solution four and one-fourth parts of ammonium sulphate, which will undergo doublé decomposition with the potassium cyanate. Finally, evaporate to dryness, when the ammonium cyanate will be transformed into urea, which is readily extracted from the residue by boiling alcohol.

COMPOSITION OF CERTAIN POPULAR NOSTRUMS.—

Walker's California Vegetable Vinegar Bitters.—Each bottle contains from nineteen to twenty fluid ounces, consisting of a decoction of aloes and a little gum guaiac, anise seed and sassafras bark, in water slightly acidulated with acetic acid, possibly the result of secondary fermentation, or added in the form of sour cider. Each bottle contains also about one ounce of Glauber's salt, one-quarter of an ounce of gum arabic, and from one-half to one ounce of alcohol. (Eberbach, Hoffman, Nichols.)

Brandreth's Pills.—Each box contains twenty-four or twenty-five pills, each weighing about two and one-half grains. The twenty-four pills consist of ten grains of podophyllum root, ten grains of extract of the same, thirty grains of the extract of poke berries, ten grains of powdered cloves, from two to five grains of gamboge, traces of Spanish saffron, and a few drops of oil of peppermint. (Hager.)

Radway's Ready Relief.—This is a light brown liquid, consisting of eight parts of soap liniment, one part of the tincture of capsicum, and one part of aqua ammonia. (Hager, Peckolt, Hoffman.)

Radway's Renovating Resolvent.—Each bottle contains about six fluid ounces of a vinous tincture of cardamom and ginger sweetened with sugar. (Hager.)

Pierce's Golden Medical Discovery.—Each bottle contains one drachm of the extract of lettuce, one ounce of honey, one-half drachm of the tincture of opium, three ounces of dilute alcohol, and three ounces of water. (Hager.)

Pierce's Favorite Prescription.—A greenish-brown turbid liquid, consisting of a solution of one-half ounce of sugar, one drachm of gum arabic, in eight ounces of a decoction made from two drachms of savine, two drachms of white agaric, one and one-quarter drachms of cinnamon, and two drachms of cinchona bark; to this mixture are added one-half drachm of tincture of opium, one-half drachm of tincture of digitalis, and a solution of eight drops of oil of anise in one and one-half ounces of alcohol. (Hager.)

Van Buskirk's Fragrant Sozodont.—A red liquid consisting of a solution of one-half drachm of white castile soap in one ounce of alcohol, three-quarters of an ounce of water, and one-quarter of an ounce of glycerine, colored with cochineal, and flavored with oils of wintergreen, cloves and peppermint. The powder which accompanies each bottle consists of a mixture of precipitated chalk, powdered orris root and carbonate of magnesia. (Wittstein, Hoffmann.)

The above are taken from Hoffmann's "Popular Health Almanac," a publication which is meant to serve as an antidote to the numerous almanacs distributed broadcast through the country as a means of advertising various patent nostrums.

Editorial.

Seeking to be the medium through which the members of the medical profession may communicate with each other on *medical subjects*, we solicit Original Articles, Reports of Medical Societies, Observations, Correspondence, News, etc., of general interest. Articles should be practical and carefully prepared.

Secretaries of Medical Societies are respectfully requested to send us Reports for publication.

Each of our professional readers is personally invited to forward us Original Articles, Reports of Cases, Medical News, etc.

The Editors will not be responsible for statements made over the names of contributors.

NOTICE TO SUBSCRIBERS.—This Journal is conducted on a strictly cash basis. Each subscriber will receive a printed notice of the expiration of his subscription, and unless prepayment for next year be made within a reasonable time, his name will be dropped from our mail list.

OUT OF HEALTH.

THE expressions "out of health," "out of sorts," etc., are very common, and deserve more consideration than is usually given them. We emphatically endorse the following observations of Sir W. Jenner (*Doctor*, March, 1875): "For myself, I have been long satisfied that a very large proportion of the subjects of organic diseases, tubercular, malignant and degenerative, using those words in their widest sense, are mistaken when they attribute the symptoms of imperfect health from which they have long suffered, to incipient local disease, and for not detecting which, they too often blame their first medical attendant."

"The 'out of health' condition is due to deteriorated general nutrition. In persons previously healthy, this malnutrition results from a variety of causes, single or combined, as overwork, anxiety, overfeeding, use of alcoholic drinks, want of food, bad air, deficient exercise, etc. This malnutrition or 'out of health' condition ultimately culminates in the extreme malnutrition of that part or organ which natural constitution or accidental circumstance had rendered less able to resist organic change."

To be "out of sorts," "out of health," etc., is the inevitable result of a violation of some one or more of the *conditions* of a physiological *life*. The existence of continual pain, languor or indefinite discomfort, is a warning of danger ahead. A wise man will heed the admonition, search out and remove the cause, and rejoice in restored vigor, or if he be ignorant of the conditions of living in all their known relations, he will call to his aid a wise physician, and abide by his decisions. Home medication in these cases is as "blind leading blind," unless, as is rarely the case, persons employing the medication have correctly interpreted the source of the trouble. In our own observations we have seen many a promising man or woman sink into a premature grave, or a life of invalidism, from simple indifference to being "out of sorts." Curiously enough, physicians themselves are quite as apt as other people to neglect their own deviations from health. Over-work, over-worry, etc., etc., palpable violations of the laws of life, constitute the treacherous sea on which our brightest students and practitioners venture only to be lost. Men establish aquariums, greenhouses, plant the varied grains, fruits and vegetables of different zones and climates, breed horses, and cattle and animals of every useful sort, etc. With laborious care they study the conditions under which each plant or animal will most nearly attain perfection, and most energetically do they endeavor to supply these conditions. A man who pays no attention to being "out of sorts" himself, will call the veterinary surgeon at once if his favorite horse loses its wonted sportiveness. In cities our prominent business men are apt to die suddenly. They pay no attention to the thousand warnings of malnutrition, crowd their powers to lightning speed, and lo, in a moment they are gone, as an exploded boiler.

The profession is gradually developing in the direction of preventative medicine. While its faith in the powers of remedies rests more and more fully upon a scientific basis, it is learning that even these are of little avail without a strict obedience of physiological and hygienic laws.

Our belief is that phthisis, malignant diseases, etc., all the so-called incurable diseases, could be wiped out of existence if proper attention were given to the *beginnings* of *malnutrition*. In our judgment he commits a grave mistake, who dismisses with a laugh the expression on the part of his patient, "I have been 'out of health' or 'out of sorts' for a long time; guess I will wear it out."

COLD AND CLOTHING.

Mr. R. Rawlinson (*British Medical Journal*, December 26, 1874) makes some valuable suggestions on this matter. He points to the following as one of the greatest difficulties in heating and ventilation: If a room be heated by fires, there are currents induced betwixt the fire and the various crevices by which air enters the room. If these crevices be closed, the air of the room becomes foul, is rebreathed and laden with the products of combustion, either of the body or of the fire. When rooms are heated by hot air pipes, etc., the temperature of the room is raised, but the ventilation is more imperfect than that of the most badly ventilated room in which there is an open fire. The difficulty lies in the combining a comfortably warm temperature with efficient ventilation. It is proposed to meet this difficulty by permitting air to enter a room in sufficient quantity, while the temperature of the room is kept much lower than is the custom, and the necessary body warmth maintained by the wearing of thicker clothes in the house. This would reduce to a minimum the change in temperature of the air passing over the bronchial tubes in going from the house to the open air. That this change is the cause of the great proportion of diseases of respiratory organs which occur in cold weather, all competent authorities admit. Those who adopt this plan will save the trouble of changing so many clothes, will save in fuel, and will avoid most chest and throat and nasal inflammations.

Those ordering journals through us will please observe the medical journals, etc., published by Wm. Wood & Co., Henry C. Lea, and *Medical and Surgical Reporter* office, have declined to commute with other firms or periodicals. Subscribers to these journals through our office will hereafter remit full subscription prices of such journals.

Communications have been accepted from Drs. N. F. Brown, T. Curtis Smith, E. B. Westen, Eugene Smith, F. A. Spaulding, D. C. Holly, H. O. Walker and A. F. Hoke.

MEMORANDA.

Dr. S. D. Gross says: "I am sure it requires only the smallest amount of brains to make a specialist."

Harnack has found that in frogs and rabbits the salts of zinc and copper paralyze the striated muscles.

The *Canadian Journal of Medical Science* is the name of a new medical journal recently started at Toronto, Canada.

The *Medical Examiner* is the title of a new weekly just started in London, England. Dr. J. Milner Fothergill is editor.

Mr. Acton, of London, England, author of numerous works on genito-urinary diseases, died in December last. Cause, fatty degeneration of heart.

"New England Psychological Society," is the name of an organization of the superintendents of New England insane asylums. Meetings are to be held quarterly.

At Benemaclet, in Spain, there is a physician in practice one hundred and five years old. His wife is in her one hundred and third year.—*L' Union Medicale*, November 18.

D. J. O. Hamilton (Transactions Illinois State Medical Society, 1875) reports the delivery of a child at full term, weighing, in a nude state, just twenty-four ounces avoirdupois.

At the late commencements, November, 1875, eleven gratuated at the Medical College of the Pacific, and thirteen at the Medical Department of the University of California.

Prof. Boeck, of Christiana, Sweeden, the eminent syphilographer, is dead. Many remember his visit to this country six years ago, and his unselfish labors in the prophylaxis and cure of syphilis.

The name of the *Chicago Journal of Nervous and Mental Diseases* will be changed by the omission of the word "Chicago." It will be issued simultaneously in Chicago and New York. Terms, $5.00 a year.

The *British Medical Journal*, December 4, 1875, says that not one school in London has received half enough subjects to set its students at work The subjects on hand were mostly procured early in the fall, and antiseptically injected.

The immediate cause of the death of Vice-President Wilson is stated (*Boston Medical Journal*) by Dr. W. A. Hammond, to have been "the sudden cessation of the processes of respiration and circulation from paralysis of the pneumogastric nerves, and that this paralysis was due to disease of the medulla oblongata affecting the nuclei of the pneumogastrics."

Louisville has started its second medical weekly. Its name is *The Louisville Medical News*, its editors, Dr. Richard O. Cowling and William H. Galt. It contains twelve octavo pages, double column. Terms, $2.10 per year. Publishers, John P. Morton & Co. The present number indicates that it has positive ends to accomplish, and intends to vigorously pursue them. It is cordially commended to the attention of our readers.

We have received the first three numbers of the *Scientific Monthly*, a magazine devoted to the natural sciences, edited and published by E. H. Fitch, at Toledo, Ohio. Pages 50; $3.00 a year. We commend it to the careful attention of those of our readers who are interested in general science, especially that portion known as natural history. It is well edited and tastefully printed, and, if properly supported, will do a good work by increasing the interest in such studies.

The reports of the Registrar-General of England and Wales show that "cold wet summers and warm muggy winters are not only innocuous, but actively favorable to the public health; whereas, fine hot summers, and bracing cold winters invariably produce excessive rates of mortality." In England and Wales, the excess of deaths during a hot summer, as compared with a cold one, is to be numbered by tens of thousands, consisting, for the most part, of infants. The excess of deaths due to a long severe winter, like that of 1874–5, reached a far more formidable total, and is shared, though unequally, by persons of all ages.—*British Medical Journal.*

One of the oldest and ablest practitioners of Butler County, Pa., relates the following (Transactions Pennsylvania State Medical Society, 1875): M. G. is a worthy farmer of the Celtic race, He came into the doctor's office with his arm hanging down, and a look of pain on his face. The doctor was going out, but stopped with a "What is the matter, M. ?" "Shure, sur, I fell on the barn flure and hurt me arm." "You did, eh; well, off with that coat and shirt." Off came the articles, and after a moment's examination the doctor exclaimed, "Why, man, your shoulder is out!" "Well, doctor, can you fix it?" "Oh, yes; lie down on that lounge." Before he complied he said a few prayers and took a drink of whisky. Without more ado he was put through all the manipulations known to ancient or modern surgery, with no good result. The patient became exhausted, cross, discouraged. The doctor, perplexed, his shirt soaked with perspiration, sat glowering at Mike in despair, when a thought struck him, and he asked, "Mike, when did you do this—get this shoulder out I mean?" "Shure, sur, I think it was *about twenty-two years ago, in Ireland.*" Two men put on their coats in short order, and one never attempts to reduce a dislocation without asking "*when?*"

Book Notices.

A Text-Book of Human Physiology. Designed for the use of practitioners and students of medicine. By Austin Flint, Jr., M. D. Illustrated with three lithographic plates and three hundred and thirteen wood cuts. Pp. 971. New York: D. Appleton & Co. 1876.

In the author's words, this book is "his large treatise in five volumes condensed." The condensation is done by the omission of bibliographical citations and matters of purely historical interest. Other subjects are presented in a more concise form than in the larger work.

One great defect of the large work was a lack of suitable illustrations of the physiological anatomy. In the present condensation a large variety of excellent illustrations has been inserted. A few of these are taken from the original works of Fabricius Harvey and Ansellius; a few are from the Army Medical Museum, and a large number are from M. Sappey's work on anatomy. The remainder are from various sources, some being original with the author. As thus collected, the illustrations as a whole are really suberb, as well as very instructive in elucidating the text.

Being condensed from an exhaustive treatise, it necessarily is very complete in the range of subjects discussed, more so than any other text-book with which we are familiar. The fine type, and the large and numerous pages, enabled the author to discuss most subjects more fully than any other author of our modern English text-books on physiology. The two last volumes of the larger work are here reprinted with scarcely any alteration. The other three have undergone greater condensations.

No statement is made of the exact chemical composition of the various proximate principles, and hence no chemical nomenclature is employed. The discussion of proximate principles is very meagre for so large a work.

On the whole, we unhesitatingly commend it to medical students and the profession at large, as fairly representing the present state of physiology. The mechanical execution of the volume is characteristic of the good taste of the publishers.

For sale by E. B. Smith & Co., Detroit.

TRANSACTIONS OF THE COLLEGE OF PHYSICIANS OF PHILADELPHIA. Third Series; Volume I. Cloth; pp. 192; price $2.50. Philadelphia: Lindsay & Blakiston. 1875.

This volume, besides lists of officers, fellows of the college, etc., contains twelve articles, illustrated by thirty wood-cuts and two chromo-lithographs. Analyses or abstracts of the articles have appeared in the REVIEW, or other medical journals. Still, we welcome them in their present complete form. The volume opens with Dr. Harrison Allen's report of the autopsy of the Siamese twins. In article ten Dr. W. H. Pancoast discusses the surgical considerations respecting the propriety of an operation for their separation. The chromo-lithographs materially aid in appreciating the full bearing of these considerations.

Dr. Jas. H. Hutchinson contributes a case of adenoid (Hodgkin's) disease, with analysis of fifty-eight recorded cases, and a bibliography.

Dr. John Ashhurst, Jr., contributes the report of a case of fracture of neck of scapula, and a discussion of the operative and conservative surgery of the larger joints.

Dr. W. W. Keen details some very interesting experiments on the laryngeal nerves and muscles of respiration, etc., in a criminal executed by hanging.

Dr. S. Weir Mitchell furnishes an account of the use of nitrite of amyl in various forms of spasm, and of its value as an aid in diagnosis.

Dr. Wm. Forbes reports the successful use of nitrite of amyl in tetanus.

Diabetes insipidus and its treatment are presented by Dr. J. M. Da Costa.

A case of encysted dropsy of the peritoneum, in which suppuration had occurred and abdominal section was performed with recovery, is reported by Dr. J. E. Mears.

The volume closes with an account of quinia as a stimulant to the pregnant uterus by Dr. A. H. Smith.

The mechanical execution corresponds with the intrinsic value of the book.

UNITED STATES OFFICIAL POSTAL GUIDE. Paper; pp. 666; published quarterly; terms $1.50 per year. January, 1876. Boston: Hurd, Houghton & Co.

This is published under the authority of the post-office department. It contains an alphabetical list of post-offices in the United States, with county, State and salary; money order offices, domestic and international; chief regulations of post-office department; instructions to public; foreign and domestic postage tables, etc. Invaluable to all having much business with the post-office, and instructive and convenient to all.

THE POPULAR HEALTH ALMANAC FOR 1876. Edited by Frederick Hoffmann, and published by E. Steiger, 22 Frankfort street, New York.

These almanacs are intended to be sold to druggists, and by them supplied to their customers in place of the usual nostrum almanac. The object is to instruct the people in many things essential to health, and especially to show them the evils of nostrums, etc. The effort is a noble one, and merits the indorsement of every lover of humanity. Of the particular almanac before us we have no words to say but those of heartiest approval.

ON PIGMENTARY DEPOSITS IN THE BRAIN RESULTING FROM MALARIAL POISONING. By Wm. A. Hammond, M. D. Pp. 15. Reprint from the Transactions of the American Neurological Society, 1875.

From clinical observations and experiments, he concludes:

1. As a consequence of malarial poisoning, the pigment of the blood undergoes a change in appearance and form, and that the alteration is effected in the spleen, leading to hypertrophy of this organ.

2. That this pigment may enter the general circulation from the spleen, either in a free condition or in pigment-holding cells, and that it may be deposited in the cerebral blood-vessels or pass through their coats.

3. These deposits may give rise to various symptoms indicating derangement of the nervous system.

4. That arsenic appears to have the power of, in a way at present unknown, so altering the character of the pigmentary deposits as to facilitate their removal, and to cause the disappearance of the symptoms to which they give rise.

5. That we may have, during the life of the individual, ocular demonstration of these facts, by the presence of pigment in the fundus of the eye, as revealed by the ophthalmoscope.

TRANSACTIONS OF THE ILLINOIS STATE MEDICAL SOCIETY FOR 1875. Cloth; pp. 285.

This neatly published volume contains, in addition to the routine minutes of the meeting, reports on various medical and surgical topics and addresses, creditable to the society, but adding nothing new to our knowledge.

FOURTH ANNUAL REPORT OF THE BOARD OF HEALTH OF THE HEALTH Department of New York City, 1873–74. New York: D. Appleton & Co. Pages 600; cloth.

This volume represents a vast amount of labor, and contains much of general interrest. Charts and drawings illustrate the text.

WILDUNGEN—ITS BATHS AND MINERAL SPRINGS. Pages 40. By D. A. Stoecher, Physician at Wildungen. Translated from the German by Dr. Chas. Harrer, M. D., of London. Copies may be had free on application to E. Steiger, 22 Frankfort St., New York City.

These mineral springs are strongly alkaline, and have a reputation in the cure of kidney disorders. Those interested in sending patients to Germany would do well to study this little pamphlet.

ADDRESS ON OBSTETRICS AND DISEASES OF WOMEN. By W. H. Byford, M. D. Extracted from Transactions American Medical Association, 1875.

Of this able address we gave a notice in our last volume.

ANNUAL REPORT OF THE SURGEON-GENERAL OF UNITED STATES ARMY. 1875.

Four thousand volumes, exclusive of pamphlets, have been added to the library during the past year. The subject catalogue is far advanced in preparation. A descriptive catalogue of a series of crania, unique in number and variety, only awaits the needed appropriation, in order for immediate publication.

HERMAPHRODISM FROM A MEDICO-LEGAL POINT OF VIEW. By Basile Popesco. Translated by Dr. E. W. Sawyer, Chicago. Pages 45; price 50 cents. Keen, Cooke & Co., 1875.

A valuable contribution to our knowledge on this subject.

THE ILLUSTRATED ANNUAL REGISTER OF RURAL AFFAIRS FOR 1876. Paper; pages 175; 170 illustrations. Price 30 cents a copy.

This is the only publication of its kind; contains matter interesting to every resident of the country.

TRANSACTIONS OF THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA. NOS. 2 AND 3.

A well prepared report of a working society.

ON THE CAUSE OF VICE-PRESIDENT WILSON'S DEATH. From *Boston Medical Journal*, December 16, 1875.

TRANSACTIONS OF THE MICHIGAN STATE MEDICAL SOCIETY. 1875. Pages 74.

MICHIGAN STATE AGRICULTURAL COLLEGE. Catalogue for 1875.

DETROIT

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Original Communications.

MALIGNANT PUSTULE. SERIOUS RESULT FROM A PIN PRICK. CASE—WITH REMARKS.

By T. Curtis Smith, M. D., Middleport, Ohio.

MRS. J. C., aged thirty-six, of nervous temperament and generally of impaired health for several years past, of sedentary habits, costive, menses regular, often the subject of severe migraine, on Friday, January 14th, 1876, accidentally pricked the left thumb over the metacarpo-phalangeal joint. The wound was not deep, but it caused more than ordinary smarting. This, however, ceased after a short time, and the little wound seemed to heal. On the 16th she felt considerable general malaise, which she attributed to the presence of the menstrual flow. On the 17th (Monday) there was now and then a sharp tingling sensation at the site of the wound, but not especially annoying until late in the evening, when there appeared a small red spot over the joint, accompanied with a burning pain sufficiently severe to prevent sleep much of the time through the night.

On the morning of the 18th (Tuesday) the redness had extended a little, and in its centre there was a little white spot about the size of a pin-head, which she picked a little, thinking there was matter in it. The whole spot was not at this time more than half the size of a three-cent nickel. The general malaise had, during the last day and night, greatly increased, so that all of her muscles felt very heavy and ached severely. She, however, did some light work about the house during the forenoon. At half-past two in the afternoon she called at my house to await my arrival, and to show me the little spot, which was now very tender. She, however, brought some sewing, at which she continued to work for a short time, but finally was compelled to desist, on account of the severe pain in the hand and arm. When she called first at the house, my wife states that the spot was quite a bright red, and looked like a very small affair.

I saw the hand about five P. M., when I found the following conditions existing. She was having frequent rigors; head ached severely; general muscular aching and prostration well defined; the pulse was ninety-six, and weak; skin cool, right hand and feet cold; tongue had a thick white fur; pupils enlarged; extreme nausea; the menses were about disappearing. The spot on the hand was about the side of a three-cent nickel, and had changed from the bright red color of half-past two o'clock to a black sphacelated appearance. The hand was swollen considerably, and a red stripe an inch wide extended up the arm well towards the elbow; the axillary glands had become swollen and painful. The pain in the hand was extreme, and was very greatly increased by handling. Diagnosis: charbon.

I made a free crucial incision through the spot, causing thereby extreme pain and the flow of a few drops of dark, thick, glutinous fluid. I then prescribed the following: Quinia sulph., two scruples; ft. pil. twenty; sig. two every four hours; and sodæ sulphocarbolate two drachms; ft. chart. six; sig. one every four hours, alternately with the pills. To have from two to four drachms of spiritus rectificatus every two to four hours as needed, and opium to relieve the pain, if it could not be endured without; but, as she had heretofore borne opiates so very badly, it was deemed best not to resort to them if it could be avoided, as the nausea and vomiting they caused had always been intense, lasting for several days.

I thought it better, if possible, to endure the pain, than take the risk of getting the stomach in a condition in which neither food nor medicine could be kept down. Certainly a retentive stomach in such a case is a means by which disease may be ably battled with, while one not retentive may permit an increase of weakness and debility that could otherwise be kept off. The pain, however, became so very excruciating by ten P. M., that she was obliged to seek relief in opium, which happily did not cause either nausea or emesis, as it had invariably done in previous attacks of illness. I also gave with the opium, at each dose, the one-sixtieth part of a grain of sulphate of atropia—a valuable stimulant—which may in part account for its failure to cause emesis. But such cases bear opiates better under such conditions than they do under ordinary circumstances.

As a local application, I used two drachms of carbolic acid and twelve drachms of water. Sig.: apply often. The hand was so hot that the cloths wet with the wash would become hot and dry in ten minutes, when they would need to be changed.

January 19.—I found the general condition much the same, except that the rigors had given way to slight fever. Temperature one hundred and one-half; pulse sixty, and very weak; had urinated excessively through the night; bowels moved once, the passage being of a very dark color, semi-liquid; countenance pinched, and very anxious. There was great nausea, but no more than from the first; food was loathed and could not be swallowed. She had retained all the medicine, however. I found the swelling had increased considerably in the hand, but had not gone much above the wrist. The spot was double the size of the previous day, was black, and was not discharging any. The swelling of the hand was strictly of an erysipelatous color; except the pustule itself, not in the least boggy. I cut the black spot out at once. The discharge from it was of a dark bloody or grumous appearance, but little discharge came from the site of the removed spot. Asked for counsel, but was refused.

Treatment throughout the day the same, except an increase of the alcohol. Opium still to be used when pain absolutely demanded it. The house was kept freely ventilated, and at a temperature of about eighty degrees. The temperature out of doors was about sixty degrees, and moist. Rigors recurred occasionally.

At two P. M. I found the general condition the same, except that the pulse had become a little fuller under the increased stimulant. The swelling had increased considerably, and the pain was very severe and burning, "like fire," as she said. There had been very little discharge from the removed spot of the morning, and the surface had become now tightly glued up, so that not a drop of fluid of any kind was escaping. I insisted on making a long and free incision over the thumb from base to nail, but could not obtain the privilege.

Treatment continued, and general condition continued the same till next day in the afternoon, except that the hand had gradually assumed the appearance somewhat of phlegmonous erysipelas, and was becoming a little boggy, the swelling now extending a little above the wrist, and the skin showing several large blebs here and there, with sphacelated spots at different points on the dorsal surface, which, however, were not deep. The pain about two P. M. on this day (20th) became doubly severe, so that, with the general systemic prostration present all along, she became greatly prostrated, and expressed herself as having lost all hope of recovery —a characteristic symptom of the disease. Would not allow an incision, but consented to have counsel. I gave her opium largely to control the pain, with but little effect. Stimulants increased; other treatment the same. I should have said that on this day (the 20th) she had forced down and retained considerable nourishment in the way of milk, beef-essence, and browned bread. Urinated freely; bowels moved as before.

At six P. M. the case was seen with me by Drs. A. L. Knight, of West Columbia, W. Va., and J. C. Bishop, of this place, both of whom agreed with me as to the *nature* of the case, and that it was a genuine case of charbon—malignant pustule, caused by the introduction of some virulent animal poison into the wound, small as it was. So there was not even a ripple of discord in our several opinions in regard to the nature of the case, or the diagnosis.

The treatment was heartily approved and continued. A free incision was at once made, and the hand bathed for several hours in water as hot as the patient could bear, to encourage the discharge. Very little, if any, pus was discharged, there being only what appeared to be blood from the incision. It was intended to destroy the sloughs on the hand with a paste of chloride of zinc, which was suggested by Dr. Knight, but on applying it I found the sloughs so superficial that the paste soon caused great pain. It was therefore, with consent of counsel, dropped, and chlorine water substituted, warm baths being frequently resorted to. I should have stated that charcoal and yeast poultices had been in constant use since the evening of the 19th, the surface being often wet with the wash of carbolic acid above given. Now, however, the carbolic acid was discontinued, and the chlorine water used freely instead of it, with the charcoal and yeast from this time on. Immediately after opening the hand, the patient went off into hysterical spasms, having several in succession, and continued to remain in a state of high hysterical excitement for several hours. This and the severe pain were controlled by large doses of opium.

The same treatment was continued till the 22d, when Tr. Ferri Chlor., gtts. xxx every four hours, was substituted for the sulpho-carbolate of soda. The quinia, alcohol and opium were then diminished till the 25th, when complete convalescence was established, and a simple tonic ordered and plenty of good nourishing food. The hand by this time had regained its natural size, the skin peeling off abundantly, and the small sloughs, as well as the incision had commenced to granulate.

This case is one of interest from several points of view—1st. The small wound; 2d. The animal poisoning; 3d. The query as to how the poison was introduced, and when; 4th. The diagnosis and prognosis.

As to the first point, the pin-prick was not deep, and was only a simple wound—no scratch or perceptible abrasion worthy of extra notice. Regarding the second and third points, how could this animal poison have been introduced? Was it introduced at the time of receiving the wound, or afterwards, and what was its nature? The pin was sticking in the dress near the shoulder when the injury was done. There was nothing unusual about the dress, which was clean, not new, and of a color that fades but little. I cannot conceive that there was any poison about the dress, such as aniline or arsenic. There was a bunch of artificial flowers colored with Paris green on the mantel-piece, where she would dust around it every day, but I cannot believe it was this that caused the trouble by becoming inserted into the wound. She had not been engaged with any kind of old clothes, decaying meat, or near diseased horses or animals of any kind, that she was aware of; hence these sources are excluded. She admitted that she sometimes picked her teeth with a pin, and Dr. Knight suggested that this may have been the source of the poison. Such is certainly possible. But it will be remembered that she was menstruating at the time of the accident. Is it not more than possible that a drop or atom of menstrual blood, in changing the napkins or otherwise, found its way to the wounded point and into the wound? Possibly the pin had been used in retaining the napkin in situ. The neatest women are exceedingly careless about where, when and how they use or abuse this valuable little domestic article—the pin. There was no doubt among us as to animal poison being introduced—the puzzle was how it was done, and when. We did not believe such symptoms could be caused in any other way than by the absorption of animal poison into the blood. There was no diseased meat eaten that we know of, and other members of the family remained well.

The fourth points—diagnosis and prognosis. My diagnosis was that of charbon—malignant pustule—and in this opinion Drs. Knight and Bishop fully concurred. A reference to the symptoms will readily exclude carbuncle, phlegmonous erysipelas, hospital gangrene, etc., and reasoning by exclusion we could not conclude that the disease was anything else than charbon, though none of us had ever seen a case of the kind before.

On taking a full review of the case, I am still more and more satisfied that it was a genuine case of charbon, notwithstanding the fact that the disease is of great rarity in this region. I have not seen a case like this in fifteen years' practice, nor have I met with any man in the profession, as yet, that ever has within his remembrance. Let us review the symptoms in the light offered by a few of our authorities.

Ashurst (1st ed., p. 395) says: "The affection begins a day or two after inoculation, as an itching red spot followed by a vesicle, which, bursting, leaves a dry brownish eschar." This one was of very dark color when I opened it. "A fresh crop of vesicles next appears around the slough, and the subcutaneous tissue becomes involved, forming a hard swelling." The spot in my case had enlarged the next morning, but the opening previously made, and the hardening effect of the carbolic acid used, probably prevented distinct vesicles being observed. The "subcutaneous tissue" was, however, by this time involved, and the swelling was "hard" and black. The involvement of the "neighboring lymphatic glands" and the severe "constitutional disturbance" were present, with also the presence of the most "intense burning pain." In this case there was "almost complete absence of suppuration," and it began "in the skin," while carbuncle and phlegmonous erysipelas, also hospital gangrene, immediately involve the deeper tissues. The deeper tissues were not involved in my case till the morning of the second day after it became noticeably painful. Again, the almost entire absence of any suppuration tends to exclude phlegmonous erysipelas or carbuncle. The color of the skin precludes the idea of hospital gangrene, for it was of a darkish or purplish red, gradually shading off to the healthy skin (erysipelas usually leaves a distinct and raised boundary), while in hospital gangrene the skin soon assumes "a shining white color."

A reference to Gross' surgery (vol. i, pp. 404–7, 3d ed.) will show a quite accurate description of the case I have detailed above (see loc. cit., Malignant Pustule), the strongest symptom, against it being the extensive swelling of which he speaks, and which was not present in my case. But the reddish point, *burning*, itching sensation, a little later the vesicle, which rapidly changed color, the raised appearance, the extreme, burning pain, its hardness, gradual extension, finally forming a small, sphacelated spot, the prompt involvement of the axillary glands, the very great constitutional prostration, all spoken of by him, were all present in this case. How much the prompt and energetic stimulant and antiseptic treatment, local and general, had to do with modifying the symptoms, I cannot say. The final result was good.

The prognosis, from the first until twenty-four hours after the incision was made, was in my mind doubtful, and this opinion was concurred in by both of the gentlemen in counsel. One day after the incision improvement was apparent, and reasonably rapid, considering how much the patient had been prostrated, and from that time onward there were no untoward symptoms, except occasionally a hysterical episode that rendered the condition of the woman both annoying and amusing.

INHERITED AND ACQUIRED PROCLIVITIES.

Read before the Detroit Academy of Medicine. By F. A. Spalding, M. D., Detroit.

It is a fundamental principle of both psychological and mental philosophy, as well as of medical science, that the three distinct elements of our being, viz., the physical, the mental and the moral, bear a reciprocal and mutually dependent relation to each other. The moral or spiritual character is molded by, and receives its tint and coloring from the mental characteristics of the individual, while the mental capabilities and powers are in turn determined by and dependent upon the physical structure and development of the brain, so that an abnormal, imperfect or defective development of the one is followed by defective and irregular action in each of the others. While, then, from a symmetrical development we are led to expect an individual physically strong and robust, mentally sound and spiritually orthodox, this law is not meant to imply that any or either of these natures may not be developed out of proportion to, or even at the expense of the others.

Not only may the physical system be developed while the mental powers remain latent, and *vice versa*, or the intellectual faculties cultivated while the spiritual are allowed to remain dormant, but what is true of the whole is true of any of its parts. The large, strong hand of the laborer, the far-sighted vision of the mariner, the delicate sight of the watchmaker, the sensitive touch of the blind, the taste so frequently acquired for narcotics, are so many common illustrations of physical acquirements.

Passing to the mental, we have developed by the study of the mathematics, for instance, a power of accurate logical reasoning; by the study of languages, a nice discriminating power and a retentive memory; and, in like manner, other faculties and powers of the mind, as the perceptions, the will or the passions, may be cultivated and developed by exercise, or depressed and held in abeyance by disuse.

Passing still on to the spiritual nature, we may notice as an element capable of development—faith, an element totally distinct from confidence, trust or belief; these belong to the mind. The mind convicted of truth is convinced; the mind believes what it sees, and disbelieves what it cannot see, but faith, "the evidence of things not seen," is the direct and legitimate outgrowth of spiritual experience, and develops proportionally with spiritual exercise and experience.

Submitting, then, without argument, these illustrations of physical, mental and spiritual acquirements, I will make as my first point what I suppose will be admitted by all, viz., that there are proclivities or propensities, physical, mental and moral, which are acquired.

The second point which I make is like it, viz., that there are propensities or proclivities which are inherited. Indeed, so nearly universal is this, that we come to expect to see impressed upon the child, in a greater or less degree, the physical, mental and moral characteristics of one or both of the parents. Dr. Alexander Walker, several years since, attempted to reduce this matter to a system, and published the following deduction, which he claimed by extensive study and observation to have substantiated, viz: "That one parent communicates the anterior part of the head, the face and the whole of the internal nutritive system; the other parent communicates the posterior part of the head and the whole of the locomotive system." Even national characteristics are reproduced. The hybrid dialect of the Irishman, or the unfortunate letter "h" of the Englishman, betrays his nationality just as surely as the black skin, the thick lip or the prominent heel of the African. The child early exhibits, not only an inclination or propensity for, but ofttimes a remarkable talent in one direction or another. One child evinces an insatiable thirst for knowledge, which no obstacles can diminish; another exhibits an innate propensity for the low-lived things of earth, which no culture or discipline will ever fully eradicate, and, despite of education, profession or position, every now and then the long ears will crop out, and the voice betray the creature to be an *ass*. Such, then, are inherited proclivities.

My third point is that inherited proclivities are the *stronger* of the two. Take, if you choose, two men—inebriates. The one, when once arrested in his course, and convinced of his danger and wrong, resolves from that moment to reform, and does so. The other likewise resolves, but, alas, in vain, and though he re-resolves and struggles with ten-fold effort, he goes on drinking still. What is the difference in these two men? You say the former has more will power. Perhaps so, but the latter has the stronger propensity to combat. He is perhaps an educated man, and needs no argument to convince, and if so, he is the more capable of appreciating it; send him the most learned physician to tell him that he is poisoning his blood, deranging his nervous system, or with eloquence depict to him a premature grave, and the man goes on drinking still. Voluntarily he resigns five, ten or fifteen years of his life, if he may but be allowed to gratify his all-absorbing passion. Nay, go still farther, let God's servant, with all the authority of the angel Gabriel, reiterate in his ears the divine law that "no drunkard shall inherit eternal life," *and the man goes on drinking still!* Now, what sort of a picture is this? I believe the one is suffering from an *acquired* proclivity, which he is able to throw off; the other is laboring under the bonds of an *inherited* proclivity, which may be checked, but *never eradicated.*

Take again, if you please, the social crime. The sexual passion is an inherited propensity. You may legislate every hell-hole out of the city, and yet the unprincipled victim of unchecked passion will find some lurking place where he may slake the thirst of his infernal passion. Talk of legislation! You can no more legislate away the inherited passions and appetites of men, than you can legislate the earth out of its orbit.

The fourth point which I make is that acquired proclivities, as well as those inherited, may be and *are* transmitted to offspring. As we have seen, there are reproduced in the child more or less of the characteristics of the parent—physical, mental and moral. We have already noticed that a national peculiarity is perpetuated, and we have an illustration still more striking in the transmission of physical and mental defects, as for instance the club-foot, the hair-lip, the nævus, or even insanity itself.

Now, we may reason as we will, as to the cause of these, whether from mechanical pressure in utero, whether from deficiency of the germ cell, or whether from arrested or defective development, or even, as apparently in some cases, from excessive development; still the fact of their transmission, even to the third and fourth generation oftentimes, proves the matter to be something more than mere accident. I myself have personal knowledge of a case where a man became deaf after arriving at maturity, and afterwards had two children born entirely deaf, who remained so through life; and, breeders of the lower animals taking advantage of this by the breeding in and in process, any peculiarities, monstrosities or proclivities may be made permanent. For instance, Dr. Copeland says, "The sheep of the Spanish Sierras originally feeding upon the scanty herbage of the mountains, where great and incessant muscular exertion is requisite, fattening becomes impossible, and sensibility, which would otherwise be unprotected, obtains an exterior covering of the finest wool; and this characteristic is perpetuated when the sheep is removed."

Mr. Knight, a writer on stock-raising, says, "The improvers, as they are called, of the Durham cattle, feed very highly. Their young cattle are kept in a fattened state from birth, and every breed of animals which has through a few generations been overfed, *requires* similar feeding, and the offspring of such animals require and can digest more food than others who have lived upon little."

A still more marked illustration is the impression, either physical or mental, made upon a mother by a male, which impression is retained by the mother, and conveyed most unmistakably to subsequent offspring. As an illustration, mention is made of an Arabian mare which had never been bred from before. After having a mule by a quagga, she had in succession three foals by a black Arabian horse, in each of which there was a most unmistakable resemblance, both in color and physical characteristics, to the quagga. This is not an isolated instance, but a fact well established, and which is recognized by all breeders of horses.

Akin to this we have, on good authority, numberless examples, sexual intercourse not having taken place, where, as Mr. Blaine says, "imprintings which have been received by the mother's mind previous to reproduction are conveyed to the germs within her so as to stamp one or more of the offspring with characteristic traits of resemblance to the animal from which the impression was taken, although of a totally different breed from the real father of the progeny." As example, Dr. Hugh Smith used to relate an instance which occurred to a favorite female setter that often followed his carriage. On one occasion, when traveling in the country, she became suddenly so enamored of a mongrel that followed her, that, to separate them he was forced, or rather his anger irritated him, to shoot the mongrel, and he then proceeded on his journey. The image of this sudden favorite, however, still haunted the bitch, and for some weeks after she pined excessively and obstinately refused intimacy with any other dog. At length she accepted a well-bred setter, but when she whelped the doctor was mortified with the sight of a litter which he perceived bore evident marks, particularly in color, of the favored cur; and they were accordingly destroyed. The same also occurred in all her future puppings; invariably the breed was tainted by the lasting impression made by the mongrel.

Having called attention to the above circumstances, I simply venture the query: If this is true of the lower animals, may not the same thing occur in the human, giving us what we call the mother's mark? It is observed of dogs taught certain tricks or habits, that the same trick is acquired by their offspring with remarkable facility. Mr. Knight makes also this observation, "Habits and pursuits long followed in families develop the organs which they employ." It is necessary that the minds of the ancestry should have been exercised in some way, and the progeny will generally be found best calculated to do that which the parents through successive generations have done.

Again, if this much of phrenology be true that by habitual exercise of certain faculties of the mind, we have thereby certain portions of the brain developed, and if Dr. Walker's theory has anything of truth in it, we must be forced to the conclusion that acquired proclivities may be and *are* transmitted.

To sum up, then, the points which I have endeavored to illustrate, we have:

1st. There are certain propensities or proclivities which are *acquired.*

2d. There are other propensities or proclivities which are *inherited.*

3d. The inherited proclivities are the *stronger* of the two.

4th. That *acquired* proclivities, as well as those inherited, *may be* and *are transmitted to offspring.*

And this, if true, presents an aspect of parental responsibility worthy of our highest consideration; for, if it is possible for the parent to transmit to his offspring one acquired proclivity, he is liable to transmit any or all.

The *habit,* or *acquired proclivity,* of the parent is reproduced in the child as an *inborn, inherited* proclivity, deeply rooted as a part and parcel of his very being, stronger than anything which can be acquired, and which no discipline can ever fully eradicate.

STRICTURE OF URETHRA.

Reported by E. B. Weston, M. D., before the Androscoggin County Medical Meeting, Lewiston, Me., January 4, 1876.

The following case of stricture presents several points which I have thought of sufficient interest to warrant my reading a brief report of it to the association.

On the twenty-eighth of last August, M. S. came to my office, saying he had trouble with his water. The odor of urine-soaked clothing, detected as soon as he entered the consulting room, at once suggested the trouble. He gave the following history: About one year ago he contracted gonorrhœa; some friend gave him a prescription, which he had filled once, and took; that was his treatment, but the disease continued; the discharge lasted for several months, and he had considerable pain and smarting during micturition; for the last three months he had been unable to pass his water freely, the stream becoming smaller and smaller, until it required strong forcing to pass it faster than in drops, and for a few weeks he had not been able voluntarily to pass it as fast as it descended to the bladder, which relieved itself continually, saturating his clothing, and making him disgusting to himself and to all that came near him. Examination showed the bladder full, but evidently not distended.

I at once attempted to introduce a small flexible catheter, and failed. I tried exploring bougies of different sizes, and, at last, whalebone guides, and failed with all. I did not prolong the trial, as it caused some faintness. I ordered him to take five grains of quinine night and morning, and to return in two days. I diagnosed, however, at least four strictures—one, about an inch from the meatus, two at about equal distances between the first and the bulbous urethra, and the fourth in the bulbous portion. The latter, which afterwards proved tortuous, with an excentric opening, was *to me* at this time impassable. In two days afterwards I made another trial, but failed to pass any instrument into the bladder. On the third trial I succeeded in passing a whalebone guide having a twisted point.

At his fourth call, I asked Dr. Donovan to see him, and he also passed a guide. We decided his condition required him to give up all work. He was ordered to go home and remain in his room, and take gtts. x of tr. ferri chlor. and grs. ij of quinine, three times a day. In three days I called to see him, and found him with urethral fever—a temperature of 104.5°, and having had a chill in the morning. He took fifteen grains of quinine during the day, and the next morning was relieved of the fever. After a time I succeeded in introducing a No. 1 of the American scale, and tied it in, hoping to accomplish our object by continuous dilatation. He retained the bougie, however, but a few hours, and for several days afterwards I could not pass an instrument. At another time I tied in a No. 1 for twenty-four hours, and, on removing it, introduced a No. 3 without much difficulty. I then reïntroduced the No. 1, purposing to have it remain another twenty-four hours, but he retained it only a short time, and had severe fever follow. Again it was several days before I could pass an instrument.

It is unnecessary for our purpose to recall each visit. Some days I was unable to pass even a guide, and with the gentlest manipulations he several times suffered with urethral fever, lasting from one to two days. October 21st he had some purulent discharge from the urethra. I concluded it was no use to think of relieving his condition by dilatation, and told him I should not attempt to pass an instrument again until the discharge ceased, and directed him to call me when it did. He had recently been taking from five to fifteen grains of quinine daily, according to his condition, which he was ordered to continue. On the 26th he sent for me. I found him having great difficulty to pass *any* water, with pain in bladder for the first time, and a general feverish condition. I gave him ten grains of quinine, with full dose of morphine, and when I called again, in six or eight hours, his pain was much less, and his bladder not so distended.

The next day Dr. Donovan again saw the case with me, and succeeded in passing a guide. After considering the case carefully, we arrived at the following conclusion: To meet the next day, introduce a whalebone guide if possible, and on it pass a Gouley's divulsor; if the divulsor would not pass, do external urethrotomy, and if the guide could not be introduced, do external urethrotomy without a guide. We met as agreed; four other physicians were invited, and attended. A guide was introduced with considerable difficulty, after which the patient was etherized. The divulsor was passed; this was a work of some little difficulty, as we had to use force enough to divulse somewhat in passing the instrument in order to get it in, but the gentlemen assisting made frequent rectal examinations to see we did not exert force in a wrong direction. After the strictures were divulsed, the instrument was removed, and a No. 9 conical steel sound passed into the bladder. The urine was then drawn, and when the patient was sufficiently recovered from the ether, he was given ten grains of quinine and one-fourth of a grain of morphine.

When he was seen again, six hours later, he had passed his urine in a free stream, and had no pain, nor were the parts any swollen. The next day he was perfectly comfortable, and passed his urine well, with almost no pain. On the third day after the operation, I passed a No. 8 sound. Since that time a No. 9 or 10 instrument has been passed every other day—latterly a No. 10 bulbous conical bougie.

November 19.—The last stricture has shown great tendency to close up; and the instrument at each passage has torn it enough to cause slight bleeding, but it causes less bleeding and passes more readily each time. The patient now has perfect control of the bladder, no urine escaping except as he wills.

A few of the instructive points in this case are the following:

1st. The improper manner in which he was treated for his gonorrhœa. A friend gave him a prescription which was to cure him—a very good way to increase the surgeon's practice, but a bad way for a poor man to get out of his difficulty.

2d. The length of time from the primary trouble to the trouble caused by the strictures was remarkably short—not more than a year; whereas, in strictures not traumatic, ten years on an average would have passed before they would have caused the trouble these did, showing the severity of his clap.

3d. The number of strictures, though not so many as sometimes found, was more than the average—one or two being the usual number, also showing the extent of the original trouble.

4th. The great tolerance the bladder had for the abnormal condition it was in. Though it had not been completely emptied for weeks, and had been about full for some time, it never was the occasion of any pain or tenderness until the week of the operation.

5th. The effect on his nervous system. He was becoming "blue" and morose; had also had several chills before I saw him. Any prolonged attempt to pass an instrument was liable to make him feel faint, and give him headache, and perhaps fever.

6th. The entire relief afforded by the operation. The amount of local injury done at the time of the operation was vastly greater than ever caused by passing a bougie. Yet that condition of the part, which in stricture is liable to cause so much nervous disturbance, was so relieved by the divulsion, that even the extensive tearing of the urethra caused no chill or fever, nor has the subsequent tearing of the part by sounds or bougies caused a single unpleasant symptom.

A CASE OF HOUR-GLASS CONTRACTION.

By A. F. Hoke, M. D., Detroit.

On December 22d, at two P. M., I was called to the bedside of Mrs. K., a German, about twenty-eight years of age, and of previous good health, who was delivered of her second child at two o'clock the previous morning. The midwife in attendance, having been unable to remove the placenta after the lapse of twelve hours, had proposed the calling in of a physician. I found the woman apparently comfortable; pulse good, but few pains, a slight flow of blood, with a history of having flowed but little.

On external manipulation, I found the fundus of the uterus, a little above the umbilicus, rather large, but not very tense; while lower down, in the region of the meridional zone, the circumference of the uterus was apparently much smaller, harder and firmer. I then made a digital examination, found the os dilatable, and, on going farther up, found a small portion of the placental mass and the cord protruding from a tense, hard stricture in the upper portion of the meridional zone, which confirmed my previous suspicions that I here had one of those rare obstetric complications—hour-glass contractions.

I called in to my assistance Dr. J. S. Kier, my partner, who verified my diagnosis, and stated that, in an extensive obstetric practice of over thirty-one years, he had met with only three other similar cases.

Proceeding to the delivery, I introduced my hand, well oiled, into the uterus as far as the stricture, and, by trying to introduce first my index finger, then the middle, etc., was at the end of fifteen minutes still unable to get my hand beyond the contracted fibres, when I withdrew my hand to make room for that of my more experienced friend, who, by pursuing the same plan of procedure, was able, at the end of ten minutes' persistent effort, to force his way through, and detach that portion of the placenta in the fundal zone which was still adherent. The uterus, responding to the stimulus thus imparted to it, contracted down firmly, bringing away his hand with the detached placenta.

The patient was afterwards treated on general principles. She made a good recovery, without any untoward symptoms.

OPHTHALMIC FRAGMENTS.

By Eugene Smith, M. D., Detroit.

AMONGST the most anxious cases with which the ophthalmic surgeon has to deal, are those of sympathetic ophthalmitis, and frequently, in spite of all our efforts, they lead to the worst results. The fact that the eye which we have to treat is usually the only one left to the patient, adds greatly to the surgeon's sense of responsibility.

The following case is interesting, as showing the value of the timely performance of iridectomy, in order to prevent recurrent attacks of iritis, which had their origin in the injured eye, and which were not checked by the excision of the injured globe. Under these circumstances, with the eye already considerably damaged and in a critical condition, I performed iridectomy, and consider that *in consequence* the eye was saved.

W. S., from the lumber woods, consulted me March 20th, 1875, his right eye having been lost by an injury two months previously. While chopping in the woods, a piece of stick flew up and struck his left eye, wounding the ciliary region. Sight was immediately lost, and the eye remained hot and painful, without any acute inflammation. About six weeks after the accident, his other eye became weak and watery. When he consulted me, the reflex inflammation had commenced in the left. The iris was swollen and looked muddy, and there was a distinct zone of ciliary congestion. The lost eye was soft and shrunken. I will state here, as a peculiar fact, that the pain in the injured eye ceased almost from the commencement of the sympathetic trouble.

I advised and performed enucleation. On examining the globe after removal, I found a puckered cicatrix involving the ciliary body on its outward side. The lens and vitreous were absorbed. The retina was wholly detached, and the space between the choroid and retina was occupied by a thin, brownish fluid.

For the condition of the left eye, I used atropine freely, and gave bichloride of mercury, with the result that the iritis subsided, leaving a partially occluded pupil and several posterior synechiæ. In about two weeks he returned home, but came back again in three weeks with a relapse of the iritis. It subsided quickly under the same treatment as before administered, but, fearing more recurrences of the inflammation, I advised him to have an iridectomy made, to which he consented. The iridectomy was made upwards, which excited a little fresh iritis, and a small amount of lymph occupied the new pupil, most of which was absorbed; and ten days after the operation he returned to his home, able to read No. 8½ of Snellen's test type. Four months after the operation the eye remained well.

Sympathetic ophthalmia often follows diseases of the eye not necessarily connected with injury, as the following case will show:

I was consulted last May concerning an infant ten months old, who when a few weeks of age, had a severe inflammation of the cornea (suppurative keratitis) of the right eye which resulted in a sclero-corneal staphyloma. The eye at times became red and apparently painful, and the other eye became watery and showed symptoms of sympathetic affection. The right eye was painful to the touch in the ciliary region, and I advised enucleation. After excision, the left eye regained its healthy condition without special treatment.

The enucleation of the first affected eye being considered the *ultima ratio* of modern treatment in sympathetic ophthalmia, the question naturally arises: When should the operation be performed? With regard to this point, each case must be considered on its own merits, but all ophthalmic surgeons are agreed that it must be done early. If irritation is caused in the eye not affected, it is very probably caused by reflex action. Prolonged irritation will certainly cause the loss of the uninjured eye, consequently delay is dangerous.

When an eye lost by injury or disease, or even when the stump which represents it is the seat of continuous or intermitting hyperæsthesia or of inflammation, either acute or chronic, it is capable of setting up sympathetic mischief in the other eye, and enucleation is indicated. It is most important to perform this operation as soon as possible after the manifestation of the first symptoms. When the sympathetic inflammation has already advanced to an iritis or irido-cystitis with exudation, enucleation is almost always useless, though the case of W. S., above cited, is a happy example of the fact that it may not be too late.

If an eye is destroyed by injury, and the wound is such that in all probability the eye must be taken out, it should be done immediately after the injury. If we are certain that there is a foreign body in the eye, or have good reasons for believing there is, we should insist on enucleation, if we cannot succeed safely in extracting the foreign body. If too much time has elapsed since the injury, and suppuration has commenced, it would be very dangerous to extirpate the eye.

There are many things to be taken into consideration; consequently, as I have above remarked, each case must be considered on its own merits, and the arguments *pro* and *con* be balanced.

Abstracts from Virchow's Archives.

Prepared for the REVIEW by H. P. Von Petershausen, A. M., M. D., Ph. D.

I. Thymol—Its Antiseptic and Antifermentative Properties.

[*Dr. L. Lewin, Vol. 65, November, 1875.*]—Lallemand made a scientific examination of thymol about twenty years ago. It is obtained by shaking the oil of thyme with a solution of soda, and by precipitating by muriatic that acid part which distills at 360° to 430° F.

Thymol crystallizes in white klinorhombic tablets, melts at 111° F., and dissolves in alcohol, ether, acetic acid and liquid alkalies. Hot water melts it to a light oil which swims on the water. One pound of cold water keeps five and three-fourths grains of thymol in solution. This liquor causes a slight burning in the mouth, and acts as astringent and anæsthetic upon the mucous membranes. The stronger alcoholic solutions cauterize even more powerfully than carbolic and salicylic acids. As an antiseptic, it was first used by Paquet in 1868, but the material he applied was only an impure sirupy substance.

The author was induced by Professor Liebreich to examine the properties of thymol. The principal results of his examinations are as follows: Only a small quantity of the one-tenth per cent solution is necessary for the arresting of the fermentation of sugar. The development of yeast and the fermentation of milk are likewise hindered by its influence, and putrid processes may be inhibited by comparatively small quantities.

Four ounces of the solution, given daily to rabbits for about ten days, did not cause any pathological effects, only diuresis was found to have increased. The same effect is exercised by it upon men, as experiments have proven. No pathological changes were revealed by the post-mortem examination.

The author thinks that thymol is a better dressing for wounds than any other, because it does not allow the development of any putrescent process; it stops all putrefaction, deodorizes bad smelling wounds, and promotes their healing. Abnormal fermentative processes in the stomach, with simultaneous dilatation of it, it is suggested, will be cured by the new remedy. In diphtheria and similar diseases caused by microscopic organisms, it is thought to be very effective. For the cleaning of wounds, it is recommended to use the stronger alcoholic solution, while it will suffice for simple dressings to take the one-tenth per cent watery solution.

II. *Enormous Development of Amœbæ in the Large Intestine.*

[*F. Loesch, of St. Petersburg, Vol. 65, November, 1875.*]—Amœbæ are rarely found in the large intestine, for which reason even prominent authors have denied their presence in this place altogether. The author had the good fortune to observe extraordinarily large numbers of them in the very interesting case of a peasant, from the south-eastern part of Russia, who came during the summer of 1871 to the metropolis, to get some work there. Here he was attacked with diarrhœa for several months; became at last weak, and was consequently sent home, where he completely recovered in the course of the next year. Then he wandered for a second time to St. Petersburg in May, 1873, succeeded in getting employment, but obtained only a miserable hut for shelter, and had to work hard to live. It happened that in August he again became sick with diarrhœa, which this time was combined with fever, weakness and tenesmus. Besides, there was pain upon pressure in the left iliac region. His stools contained slime and pus formed into balls. A large number of amœbæ were found in them. Arg. nitr. with opium, clysters with arg. nitr., carbolic acid internally, and clysters with it, did not until November improve the patient's condition; and amœbæ were still found in his stools. Other remedies were then used, as tannic acid, plumb. acet., nux vom., rheum, bicarb. soda, but with no better results. Meanwhile experiments with dogs led to the view that the disease would be mastered only if the amœbæ were beforehand destroyed. As a solution of $\frac{1}{5000}$ sulph. quin. was sufficient to kill the parasites in a few minutes, a new medication commenced. The patient received a clyster of one scruple of quin. sulph. in one ounce of water, and afterwards of as much more tepid water as he could bear. Besides, he took twice a day five grains of quin. sulph., of which the dose taken lastly was combined with sulph sodæ, to hinder the absorption of the quinia by the stomach, and to clean his intestines. When the patient had been treated in this manner for about one week, he felt much better, and a few days later no amœbæ could be detected in his stools.

It was now hoped that the patient would entirely recover, but not much later a few amœbæ were again found in his stools, and one week after this their number was as large as before the treatment with quinia was commenced. Probably there were a few amœbæ left undisturbed by the quinia, and these rapidly increased.

The treatment was expectative which now followed. The patient became very weak, and in March, 1874, a pleurisy attacked him, under which his temperature was raised to 105° F., and his stools became of a typhoid-like condition. The amœbæ now disappeared for a second time, and were not again observed. The author thinks that they were killed either by the high temperature or on account of the chemical properties the patient's stools assumed. Though afterwards the inflammatory state of the intestine was improved, the patient's life could not be saved, as the pleurisy was followed by cheesy pneumonia in the apices of both lungs.

By the post-mortem examination it was found that the mucous membrane of the large intestine was thickened, hyperæmic and œdematous. Extravasations and healing ulcers, also cysts arising from the submucous membrane, were found in certain places. The body of the parasite consisted of a partly granulated, partly hyaline, protoplasm, inclosing a pale, round nucleus and several vacuoles. A number of accidental parts, as bacteriæ, vibriones, micrococci, red and white blood corpuscles, and nuclei of decomposed cells, was also entangled in the body of the animalcula.

The disease was developed in a similar manner in a dog, into whose rectum was introduced a number of amœbæ. After the dog was killed, there could be observed in the intestine similar changes to those described. The slime in the dog's rectum, as well as the ground of the ulcers, was covered with amœbæ. But, as the phenomena of the disease were developed only gradually in the dog, but stormily in the patient, the author thinks that the patient was first attacked with dysentery, and afterwards became infected with the animalcula.

III. On the Sequelæ of the Embolia of Pulmonary Arteries.

[*Drs. Jul. Cohnheim and M. Litten, of Breslau, Vol. 65, October, 1876.*]—When a branch of the pulmonary artery becomes obstructed by an embolus, there follows in many instances a hemorrhagic infarct, but we observe oftener branches of this artery stopped, and yet cannot find any anatomical changes in the lungs as a sequel. Moreover, there is no difference to be observed between an embolus that caused an infarct and one without this sequence. Several authors tried to find a satisfactory explanation for these facts. But, as by Hyrte, and, of late, by Rindfleisch, there was denied any anastomosis between branches of pulmonary arteries, only experiment could give a decided answer to the question.

The authors have pursued this course, performing experiments with rabbits and dogs. An embolus of paraffine was introduced into the jugular vein of these animals, and into another vein there was made a careful injection of floating chromate of lead. In all cases no particles of the salt could be found in that part of the lungs which was obstructed by the embolus. This proves that the pulmonary arteries do not communicate with each other. But there now arose another question, viz: By what means was the integrity of the lung tissue kept intact in case of obstruction?

To settle this question, the authors injected a solution of blue aniline, in small quantities at a time, into a peripheral femoral artery. After a time the mucous membranes of the animal assume a deep blue color; then the animal becomes soporous, and in most cases dies soon afterwards. All organs of the body appear injected in the finest manner post-mortem. As the authors intended to examine what part in the circulation of the lung was played by the bronchial artery, they obstructed the pulmonary artery of one lung before the injection was made. Afterwards the obstructed lung was found pale and uncolored, and only the walls of the bronchi appeared injected. By this it was evidently proved that the bronchial arteries convey considerable quantities of blood to the parenchyma of the lungs, even if the pulmonary artery is obstructed. But it shows further that the blood in the vessels of that part of a lung of which the principal vessel is obliterated, can only come of the adjacent lung capillaries. This seems to be strange, but we dare not forget that the lung capillaries are wider than any other of any organ, so that only one-third of the aortic pressure is sufficient to move the blood through them to the veins. The circulation in the mentioned part of a lung will be, of course, only sparing, and the vessels will be only partly filled, but nevertheless they will keep intact for a longer period.

From what has been said, it will be evident that a depression of the action of the right heart (by fever, fatty degeneration, difficult venous efflux, on account of valvular disease in the left heart, etc.) will materially favor an infarct. But the authors' experiments explain also another point, namely, that in case of obliteration not followed by an infarct, death may follow on account of insufficient respiration, caused by the want of blood in the affected part.

IV. Giant Cells in Healthy Granulations of Wounds of Men.

[*Dr. Alex. Jacobson, of St. Petersburg, Vol. 65, October, 1875.*]—The author's material was taken from wounds of living men, and hardened in Mueller's liquor. Only such tissues were examined as were found in a healthy state, and which surely were of a new formation. The giant cells could not be observed in the pyogenic layer, but only in the plasmatic stratum. They vary in largeness and in form; sometimes they have prolongations. The nuclei were sometimes placed near the periphery of the cells, in two, three or more rows, sometimes scattered in the protoplasm. The nuclei were pale, had an oblong form, and appeared in different states of partition. The protoplasm was pale and finely granulated. Giant cells were observed in wounds caused by various circumstances, and occurring to anæmic persons as well as to persons in good health.

As of late giant cells have often been the object of researches, the author points out those states of tissue and its elements, which may easily be confounded with them. As such he considers: 1. Cross-sections of lymph vessels; 2. Cross-sections of thrombous vessels, to be recognized as such by the organization of the thrombi; 3. Cross-sections of capillaries and other small vessels filled with white blood corpuscles; 4. Conglomorates of detritus, which are only to be expected in pyogenic layers; 5. Micrococci; 6. Cross-sections of hypertrophied muscle fibres; 7. Cross-sections of epitheloid formations; 8. Cross-sections of nerve fibres—but these are only confounded with a weak magnifying power.

The author considers it as probable that the giant cells may originate from white blood corpuscles. If there is any connection between giant cells and blood-vessels, be did not observe, but thinks it is possible.

Reports of Societies.

DETROIT ACADEMY OF MEDICINE.

DETROIT, January 27, 1876.

THE academy was called to order at eight P. M., the president, Dr. Gilbert, in the chair.

Dr. **FLAGG**, of this city, was introduced to the society.

Dr. **LA FERTE** exhibited a specimen of acephalous fœtus at seven months, with entire absence of occipital bone, showing the fourth ventricle of brain.

Drs. **CLELAND**, **GILBERT** and **ANDREWS** described similar cases as having occurred recently in their practice.

Dr. **GILBERT** raised the query: Are these cases imperfect from the beginning, or is the deformity caused by absorption?

Dr. **LYONS** thought that certain conditions were requisite to complete and perfect development of fœtus. Mentioned a case among the lower animals where a hen while setting was driven from her nest, and the eggs became chilled. When the brood was hatched, two of the chickens had talipes. Might not the chilling of the eggs have caused a partial arrest of development?

Dr. **GILBERT**—Can a mare which has been habitually shackled produce pacing progeny? Is there in this case a mere coincidence, or is there a hereditary influence which bears the relation of cause and effect?

Dr. **CLELAND** mentioned a case where a woman, frightened by seeing a cat in a fit, was strongly impressed that there would be deformity of the child. She was delivered at the eighth month; the child made a noise like a cat in a fit, and had arms rudimentary and head acephalous.

Dr. **JENKS**—Mental impressions of the mother undoubtedly do affect progeny.

Dr. **GILBERT**—Shall we encourage the general apprehension of danger from this source among our patients? He thought not—believing the less fear, the less danger.

Dr. **ANDREWS** was disposed to regard deformities of a fœtus consequent upon violent mental impressions on the part of the mother, as the exception, rather than the rule.

Dr. **McGRAW** called the attention of the academy to the question of diagnosis, particularly in cases of cerebral trouble. He mentioned a case to which he was once called, where the patient had been for a long time under treatment for cerebral anæmia, so diagnosed from anæmic condition of retina. The patient was in an apoplectic state—stertorous respiration, pupils contracted, etc., exhibiting typical symptoms of apoplexy. He bled, and the patient recovered. Could there have been cerebral anæmia?

Have we any right to conclude there is cerebral congestion or cerebral anæmia because the vessels of the retina are so; and may not their condition be fluctuating? Is this a safe basis of diagnosis?

Dr. **Shurly** thinks the ophthalmoscope not reliable as a means of diagnosis in cases of cerebral trouble. An anæmic patient may vary as regards the amount of blood in the brain, as at the time of a debauch. Pathology has taught that the nervous system controls circulation.

Dr. **Jenks** inquired what we were to understand by the term "spinal irritation," so frequently used.

Dr. **McGraw**—There is a difference in the pathology—there may be either hyperæmia or anæmia.

Dr. **Andrews**—We undoubtedly group under the term "spinal irritation" a variety of conditions, as our ancestors grouped thoracic diseases. In some cases there is anæsthesia, in others hyperæsthesia from blows, or injury from shock. Thinks the vaso-motor system has much to do with it, affecting contraction of vessels; thinks the vaso-motor system has more to do with it than local lesion. The proportion rates ten cases among females to one in males.

Dr. **Gilbert**—We must bear in mind that pathology is the reflection of morbid anatomy, just as physiology is the reflection of anatomy; our treatment must be based upon pathology proper, not upon morbid anatomy. Once saw a case where symptoms indicated bleeding, but post-mortem showed cavity and softening of brain; yet bleeding was proper, though morbid anatomy would not indicate it.

Dr. **Shurly** reported an interesting case of hematuria.

Society adjourned.

F. A. SPALDING, *Secretary pro tem.*

Detroit, February 13, 1876.

The society met at the office of Dr. Inglis; the president being absent, Dr. Noyes took the chair.

The minutes of last meeting were read and approved.

Dr. **Noyes** presented to the academy a patient who came to St. Mary's Hospital for treatment for a peculiar throbbing in the throat. History is as follows: Female, German, twenty-one years of age, came to this country two years ago. For several years previous to this time she had an otorrhea of right ear, which disappeared after she crossed the ocean. This peculiar throbbing commenced about a year and a half ago. On examination, the drum of the ear is thickened; the eustachian tube was not examined. She is somewhat deaf. Opening the mouth and depressing the tongue, a convulsive contraction of the muscles of deglutition on the right side is quite observable, and slightly so on the left

This motion of the muscles is continual both while awake and asleep; a clicking sound is quite plainly heard; if the patient's attention is attracted, it will stop for a few seconds. The patient, owing to a superstition of her sister, who told her that if she interfered with her hair she would never get well, had not combed it for fifteen months. On entering the hospital, the doctor ordered the hair to be removed, and the head thoroughly washed. He put the patient upon large doses of bromide of potassium, combining with this remedy the following day the iod. potass. She had now been under treatment about five days, and with some improvement. The doctor stated that there was amblyopia of the left eye. As to the real cause of these peculiar symptoms, he was not prepared to say, but was under the impression that it had its origin in the difficulty of the ear, and by reflex action produced the symptoms mentioned, and it was for this reason that he had resorted to the remedies that he had.

Dr. **Munson** stated that he was of the opinion that there were three points from which we might make out the diagnosis: 1. Central; 2. Mennier's disease, and, 3. Of reflex origin. He regarded these peculiar symptoms as due to the chronic inflammation of the ear, and, as the nerves supplying this part connect with the central ganglia, this trouble can be looked upon as functional, and due to reflex action.

Dr. **Cleland** thought that this want of coördination of muscular action was caused by the disease of the ear, and of eccentric reflex origin. He recommended arsenic in addition to the remedy used.

Dr. **Gilbert** advised tonics, and he asked, "Why do we not have more reflex actions from local congestions?"

Dr. **Cleland** exhibited a patient twenty-one years of age, with collapsed left lung. Had typhoid pneumonia three years ago. After six weeks there was considerable effusion, with collapse of lung. This patient has been under the doctor's care about two years. At the present time there is enlargement of the right lung, hypertrophy of the heart, and dilatation of right cavity of heart. There is slight crackling respiration of left lung; also considerable cough, with watery expectoration. A few weeks ago the action of the heart was very rapid, which improved under the use of digitalis.

Dr. **Cleland** asked for the probable prognosis and management of the case. He had been using tonic remedies. The right lateral curvature of the spine was increasing, and to his mind there was evidently some important heart difficulty going on.

Dr. **Noyes** said that he had had a similar case, where Dr. Bowditch had given an opinion that the patient would not live a year, but he did live many years after; and he (Dr. N.) thought that it was impossible to give an opinion as to the duration of the patient's life in these cases.

Dr. **Andrews** remarked that we were not apt to give credit to the small portion of lung that is able to support life. Patients in this condition were able to meet all ordinary conditions, but it was when any interference occurred that such patients succumbed.

Dr. **Cleland** thought that the principal cause for alarm in this case was the trouble of heart.

Dr. **Flinterman** exhibited a German, thirty-eight years of age, with dilatation of the stomach. About six months ago he was hurt on the right side by a falling piece of timber. The patient's mother died of cancer of stomach. He vomits a sour material after taking food; has pain in right side; digestion bad and bowels costive; the pain is most severe at night; no cancerous cachexia. The doctor said he intended to use the stomach pump in this case, and regarded the dilatation as due to a constriction of the pylorus.

Dr. **Carstens** recommended the use of electricity, as he had used it in similar cases with benefit.

Dr. **Noyes** thought that this trouble might be attributed to the injury the man had received some time ago. He had had many cases of cancer of the stomach, and he never found any difficulty in making out the presence of a tumor in this locality.

Dr. **Gilbert** related a case of cancer of the pylorus, which he had diagnosed as such. He thought the lesion of the nerves supplying the pylorus a sufficient cause for the vomiting.

Dr. **Inglis** exhibited a patient before the academy with the history as follows:

A. Van B., aged thirty-two; father died of obstruction to respiration by large tumor of neck; had two large tumors on back of neck, and one on each arm. Patient was married in 1866. In 1867 black pimple appeared on tongue, which was followed by large ulcer; similar ulcers formed on other parts of tongue and on the soft palate, resulting in loss of substance; tongue much swollen, and intensely painful; lasted more or less for three years. In 1868 testicle began to swell, and grew until, in August, 1871, it had become so large and hard, that it had to be extirpated. In January, 1872, began to have "spells," and at same time noticed considerable increase in the flow of urine. Spells have now become very frequent, and flow of urine very excessive. In regard to the character of the spells, he knows when they are coming on, becomes almost but not entirely unconscious as a rule, sometimes completely so; does not have convulsive movements, but is powerless; feels head to be congested; generally goes off to sleep for a couple of hours, without first regaining consciousness; memory failing; no severe pains in head; no paralysis, but has occasionally felt benumbed, especially in tongue; nervous always; hard user of tobacco; urine passed in twenty-four hours amounts to two hundred ounces, the average being thirty-five ounces; analysis, no sugar; appetite fair; bowels regular.

Dr. **Carstens** had no doubt but that this patient had epilepsy, having for its source syphilis, as he had examined him and found nodes upon the shins, and recommended large doses of iod. potass. —three-grain doses three times a day.

Dr. **Walker** reported the history of a case of fracture of the sixth cervical vertebra.

Dr. **Yemans** reported a case of remittent fever where the temperature was 107°.

Dr. **Cleland** made mention of a case of herpes over the forehead and scalp in a patient seventy years of age, extending along the medial line; he regarded it as due to a lesion of the supra orbital nerve.

Society adjourned.

H. O. WALKER, *Secretary.*

Correspondence.

West Joplin, Jasper Co., Mo., Jan. 30, 1876.

Editors of the Detroit Review:

Dear Sirs—Through the kindness of Dr. W. B. Smith, of Ann Arbor, I received a few days since a copy of your Review for January. I expected to find something in it about the late laboratory troubles, and I hoped that the investigations might prove entire innocence on the part of Professors Douglas and Rose, and that the worst feature would be carelessness in the method of keeping accounts. But to my surprise and sorrow I found, instead of news on that subject, something totally unlooked for, namely, the unconditional surrender of the time-honored and scientific faculty of Michigan to the homeopaths, with one honorable exception, Dr. Sager.

I expect that so much has been said and written that you are perhaps getting tired of the subject. But I will state how I feel as one of that great body of graduates of medicine from Michigan who are stationed out on the frontier, so to speak, of the battle-field that is in the new portions of our country, where quackery and imposition have always found their most genial soil. That this is so is easily shown by the facts that people, constantly moving in and out, are not so well acquainted with each other as in the East, and that there is more superstition on account of want of education and refinement. Until about sixteen months ago there was no bar to anyone practicing here. In March, 1874, an act was passed requiring anyone practicing medicine or surgery in Missouri to register a copy of his or her diploma, or, in lieu of a diploma, to state under oath that he or she had practiced for ten previous to the act in the State, and all must be registered by the following September, or pay a fine of between twenty-five and five hundred dollars for each and every offense. A supplementary act was passed that anyone who was not in the State at the time of registration, but who came in after the required time, and could take oath that he had practiced ten years before the act in the State, could also be admitted to practice. Well, under this act, we had a miserable old quack arrested, and now have him bound over to appear before the Grand Jury next term. There are several things in our way. In the first place, we cannot get the doctors together in sentiment. It is "every man for himself, and the," etc.

When I came here four years ago to this mining district (camp it was then, now a city of between eight thousand and ten thousand inhabitants), armed with my diploma, filled with enthusiasm awakened and fed by my worthy preceptors, the faculty of Michigan University, I took high ground, and, although I had an uphill time of it for a while, other gradutes coming in, two or three of them also from Michigan, we leagued together, and it has brought good results. Our opinions are respected, and our counsels have weight. This action of the faculty makes us feel blue. Why did they not resign, or threaten to do so if the legislature or regents did not alter their action in the shortest time possible? Why, if they had been driven to resign, and had they called upon the alumni of the medical department of Michigan University, not a man of us, I think, but would have given money and moral support to start an independent school, with them for the faculty. I cannot believe that Dr. Palmer (whose work on homeopathy I have before me), that Drs. Ford and Cheever, men I almost looked upon as if they were blood relations, squarely looked this thing in the face. I have always proudly hung up my diploma on my wall, but when Michigan University begins to send homeopaths or any other species of quacks out into the field, I shall feel like turning it to the wall, or hanging it in mourning. But enough of this subject.

I will say that in a radius of over a hundred miles I know of but one homeopath. That tells the story for small doses of nothing in a sickly, malarial climate, and I can swear that he uses as large doses of calomel, quinine and opium as I do; if he did not, he could not practice here a month. Medicine has to be used here; people do not get well here by the inherent power of their own vitality, and some doctor get the credit, but strong medicines, as the people term them, have to be used, and that, too, quickly.

I noticed in your journal three cases of triplets—two in England, one in France. I had a case here in Joplin last August. Mrs. Reed, wife of a real estate agent; both father and mother scrofulous people; both poor in health; had already had five children, all single births. I was called, and delivered one healthy male child. The placenta was detached, and I had trouble to stop bleeding; but I then called in Dr. Abbot, and he manipulated over the abdomen, while I applied the forceps and delivered two more, both breach presentations. The last two were still-born, and no artificial respiration or other means would bring them to life. The first one lived and did well, also the mother. The children were all three attached to one placenta by three umbilical cords.

About two years ago I had a case of spina bifida where the spinal cord was exposed to view for two inches. There had been a tumor, about as large as my closed hand, on the back, over the lower dorsal and upper lumbar vertebræ. This had burst during delivery. I cut away the superabundant tissue, and dissected all the lining membrane, except the small strip covering and adhering to the meninges of the cord. I closed with suture, and injected persulphate of iron, etc , but found that when I decreased the flow of fluid from the wound, the anterior fontanelle would rise, the eyes become convergent (strabismus), and other symptoms of acute hydrocephalus appear. It lived six weeks.

I have met many interesting cases here, an account of which I should have sent to the journals, but business has been urgent, and I have felt too tired to do any writing, especially on medical subjects.

Yours truly,
CHARLES F. TITUS, M. D.

P. S.—I would sooner give one day's practice every week, or the proceeds thereof, to aid in establishing our old faculty in a school of their own, than see them go down with the old ship dishonored, and dishonoring us who have graduated there.

ANN ARBOR, February 12, 1876.

Messrs. Editors of Detroit Review of Medicine and Pharmacy:

GENTLEMEN—In the February number of the REVIEW we find a broad denial, by Professor Ford, of the correctness of our historical statement, so far as concerns his participation in the action of the faculty, touching the incipient stages of that action, in relation to the introduction of homeopathy into the medical department of the University.

This denial forces upon us the necessity of making a statement more in detail of our own recollections of the record made at the time, as dean of the faculty, and also to furnish corroborative testimony from other reliable sources.

As we stated in a former article, the homeopathic bill introduced into the Senate, as drawn up by Dr. Ellis (homeopath), of Detroit, and generally known as the "Detroit Scheme," contemplated the establishment of a complete homeopathic college, with six professorships, and with a salary of one thousand dollars for each professor; the course of instruction to continue during the usual period of four months. In this form, and with this understanding, it passed the Senate by a nearly unanimous vote on the 13th of April.

This bill was approved and voted for by several of the alumni of the medical department of the University, in the confident expectation that the long-drawn controversy respecting homeopathy would thus be closed, with general satisfaction to the homeopaths, and without injury to the regular school as it then existed.

This bill was reported back to the Senate, by the committee to which it had been referred on the 8th of March. A day or two later, a meeting of the faculty was called at the joint request of Drs. Ford and Douglass. This is admitted by Dr. Ford in his reply. It would seem to be but a fair presumption that they were also agreed as to the special object of the call. The purpose of the meeting was stated by Dr. Douglass to be to ascertain whether the faculty were not willing to make some concession by which the homeopaths might be allowed to acquire the long-sought connection with the University. This proposition, it will be observed, was made to the faculty when the bill then before the Senate contemplated an entirely separate and complete college of homeopathy, and probably to be located at Detroit.

In the discussion of this proposition, Dr. Palmer expressed his surprise and regret that such a proposition should have been brought forward by a member of the faculty, when the homeopaths were greatly discouraged and willing to accept of an appropriation on any other terms.

Dr. Douglass advocated it on the ground that the difficulty of procuring appropriations for the needs of the University would thus be obviated. An adverse report had been made in the House of Representatives, but a few days previously, on the original bill for a school of mines, asking a very large appropriation for that purpose. With a greatly reduced appropriation, it passed the House a few days before the close of the session. Dr. Douglass, it is generally known, has accepted a professorship in the new school of mines.

Dr. Ford took the same position, and asked whether the faculty would allow the University to be ruined, rather than make the required concession. In short, the proposition was negatived by a majority of the faculty, partly on the ground that such a concession would involve a professional immorality—a *malum in se*, and in part because the circumstances called for no concession.

This statement is made from memory, a copy of the record of the faculty having been mislaid. If any error exists, the faculty are requested to correct it by publishing a verbatim copy of the original record, which is in their possession, and not easily accessible to the writer.

In confirmation of these recollections, we quote from a letter by Professor F. H. Gerrish, dated December 3d, 1875, viz:

"I have no recollection of being present at more than one meeting of the faculty at which the homeopathic question was discussed. The exact date of that meeting I am unable to give, but can come very near it. I remember that it was just before the final examination of the medical class (the third week in March), for after we had finished the homeopathic discussion, I was deputed to make out a time-table for the examination. This circumstance is vividly impressed on my mind as being at the close of our meeting, which must have taken place, I think, on the 12th or 13th of March.

"At that meeting, you and Dr. Palmer and I were the principal opponents to the measure proposed. You took the ground you now do. I believe I was with you entirely. Dr. Palmer warmly insisted on the folly of yielding anything to the homeopaths, when they were worse beaten than they ever had been, and had nearly given up the fight. Dr. Douglass wanted to let them in. Drs. Dunster, Maclean and Frothingham expressed no decided opinions, but were not emphatically opposed to the admission of homeopaths on the plan proposed. The president thought the faculty ought to make concessions for the sake of helping the University to large appropriations.

"*Dr. Ford expressed an opinion which I remember as being more nearly like that of Dr. Douglass than that of any other.* I am quite sure about the various opinions, but cannot give them more definitely."

Several important points are established by this testimony:

1st. That at no other meeting of the faculty during the term was the subject of homeopathy discussed, hence at no other could Dr. Ford have advocated its admission, or opposed it.

2d. This meeting of the faculty, which Dr. Ford admits he did request, was called for the purpose above stated, and Dr. Ford brought forward no other business.

3d. The expressed opinions of Drs. Ford and Douglass, and the president, were in favor of the admission of homeopathy.

From these premises, we think the inference entirely logical and not overstrained, that at the meeting of the faculty with the medical committee of the regents, at which the plan of organization was submitted, Dr. Ford might, with the greatest propriety, be counted "as present in sentiment," and in "entire harmony with its action." But, as admitted in our September review of the faculty statement, Dr. Ford had in all former years stood firmly with the rest of the faculty in opposing the admission of homeopathy; and in 1867, when the regents proposed to establish it under almost identical circumstances, he, in common with nearly every other member of the then existing faculty (the present faculty consisting chiefly of young bloods), had prepared his letter of resignation, and would have tendered it if the plan had been executed. The grave defection, at which some of the faculty were greatly surprised, became known to them first at this meeting.

But, granting that Dr. Ford was absent in person when the Board of Regents enacted the plan of organization, he returned to this city prior to the meeting of the board at which the homeopathic appointments were made; but neither then nor since has he uttered a whisper of dissent, but has given an *unhesitating practical approval* of this act of organization.

He seems since to have discovered that "to approve or reprove the action of the board was no part of his duty." Can it be that his unfaltering loyalty and obedience to the mandates of the board were secured by such intimations as Regent Rynd, in his recent letter in the *Philadelphia Times*, says was given to the faculty by the medical committee, that they were not summoned to discuss or interpose objection to the plan of organization, but simply to decide then and there whether they would submissively accept the situation, or step down and out, with the assurance that the regents were prepared to meet any emergency?

Alas, how painful the contrast with the action of the faculty of 1867 (of which but two members remain), when, instead of making a statement after three months' deliberation in the vain effort to serve two masters, they submitted a manly and vigorous protest, of which the following extract exhibits the general scope and character, viz: "It would destroy the good name and standing of the medical college in the whole country. Any affiliation with homeopathy would be a violation of the code of ethics of the American Medical Association. * * * This written code of ethics is law unto the profession over the entire Union, and its violation would inevitably lead to the expulsion of the faculty and the graduates of the institution from every medical association or society in the country. We, the faculty and graduates, would be outcasts from the profession, and the diplomas would not be worth the parchment upon which they were written, as passports to admission to the medical profession. Our certificates of attendance would be worthless to the student desirous of attending lectures in any other college."

The faculty of 1867 evidently did not think that "to approve or reprove the action of the regents was no part of their duty." True, most true, circumstances have greatly changed since then, and after many years of self-respectful but self-denying opposition to charlatanry, the faculty have discovered the happy means of reconciling a submissive sense of duty with a humiliating but fruitful obedience to authority.

Respectfully,
A. SAGER.

HOMEOPATHY—"AS YOU LIKE IT."

Messrs. Editors:

CAN you shed any light on some ways that are dark to a busy practitioner who has no microscope? We gentlemen of the rural districts are in danger of becoming badly mixed on the homeopathic question, through the efforts of the faculty to enlighten us, and are uncertain whether the trouble with the college is evolution or revolution. We are gravely informed in that "comedy of errors," the famous statement No. 1, that an unfortunate state of things has been inaugurated in the college, for which the faculty are in no wise responsible, yet hasten to rise and explain—that it is all right anyway, is even better than the old way, and that it is strange it had not been done before; that they have resisted similar "complications" for twenty years, yet accept terms of unconditional surrender to this, and give some boot in defending it, notwithstanding homeopathy is as absurd as ever, and its practitioners unworthy professional association; that the State Society did a wrong thing in proposing a mixed board of examiners to winnow out as many quacks of all kinds as possible, yet it is all right for the faculty to help hatch out a new brood; in short, that the whole arrangement was bad, was effected "during the absence of some of the faculty from the State, and in opposition to their well-known wishes"—yet they "expect to be sustained by all judicious physicians!"

The faculty do not seem to show to better advantage in the editorial capacity. In the November number of their journal they say that, "after the most careful and conscientious reflection, they came to see with *one accord* that the course which they have taken was the *only one* which they could, in justice to themselves and the profession, adopt and defend." "Moreover, it must be remembered that the policy of the faculty has been fully indorsed by the State Medical Society, and by almost every local society in the State." If it is not too much trouble, will they tell us *what* societies?

But in the December number they say, "though they wanted nothing to do in the remotest manner with what they regarded as absurdity, delusion or quackery," etc., yet they "can but approve this decision" (that is, of all those whose salaries are more than "only two hundred dollars," to hold on), "and believe, with Dr. Flint and others, that the result will show its wisdom." ("Wisdom is the principal thing, therefore get wisdom; and with all thy getting, get understanding.")

But "should the Legislature and the regents determine to give the homeopaths an entire faculty and another location, we shall not regret it." An "*entire* faculty!" Their modesty will be the death of the faculty yet.

But they ought to regret it, if, according to the November editor, they "are now and will continue to be fully sustained by the public sentiment of the profession," and that its "impartial verdict cannot fail to be unequivocally in favor of their conduct and motives." And what need of "peace" has a faculty that has "pursued its way" with such an "even tenor," and "displayed" (?) such "serenity and confidence?".

Besides, what necessity for breaking up the arrangement now, so long as the November editor assures us that, "Having strenuously resisted homeopathy from the first, and having kept it out of the University as long as it was possible to do so, when at last it had to be admitted, the faculty have taken every precaution to prevent its admission from having an injurious effect upon the interests of the profession at large." Thanks. We should not otherwise have been so sure of it.

We would suggest to the successive monthly editors of the journal to read its files. We cannot forbear quoting the editor for January, 1875, whose "autonomy" at that date apparently had not been "disturbed" by "complications." In speaking of the Jackson physicians' collecting association, he gave this sound advice: "We have no sympathy with an association made up of such heterogeneous constituents; even the plea of offensive and defensive alliance against a common evil does not justify it. The physician has no right to compromise the dignity of his profession by an association with illiterate and pretentious practitioners. The physicians of Jackson owe it to their brethren to withdraw at once from this unholy alliance."

We are informed that the Jackson physicians withdrew.

Would it not be well to repeat the advice for general effect.

It is not long since the faculty, in their university journal, favored educating the masses by popular lectures as a remedy for quackery, but now they seem to have changed their plan to educating homeopaths, and leave the masses in ignorance to think it all right.

To a man "up a tree," who looks "on this picture and on that," and then on t'other, it seems as if the faculty had read that homely old maxim, "First go ahead, then see if you are right." It is small credit to the faculty for them to say they have stood the brunt of opposing the introduction of homeopathy in the university for twenty years, if it were literally true, as that was their duty and their interest, though it will doubtless interest those gentlemen who have rendered efficient aid to relieve the faculty in their biennial scares during the sessions of the legislature, to see this acknowledgment of their services, some of whom were working for the University when members of the present faculty must have been small boys.

The profession of the State have ever been ready to support the faculty in any and every effort for their mutual good, whether to resist homeopathy or to advance the standard of medical education—especially if it be a real advance—when it seemed acceptable; but the faculty as a whole apparently have not always desired assistance, and they have not encouraged voluntary aid. It is well known to the older members of the profession that some members of the faculty are seldom or ever seen at medical societies except when some influence is to be exerted, though they have been very successful in the business of teaching, making it profitable.

The query has been raised in this vicinity whether the prospect of an enlarged field for consultations thus opened, furnish any of the reasons which tend to reconcile the faculty to the situation, and to defend it with such zeal? But if that is the plan, would it not be well to have some general understanding?

The brave militia captain when brought face to face with the enemy observed to his company in ordering a retreat, "as I can't run very fast I'll start now!"

A prominent eclectic doctor of this county boasts that the Prof. of Surgery came to his aid in consultation; and his patient and their neighbors naturally think that eclectic practice must be all right, and that we regulars must have been very wrong in declining to meet this quack, who thus secures the double advantage of a consultation, and of using a professor in the university to strengthen him in his position, and at our expense.

We do not charge that the professor did this knowingly, but if not, it is inexcusable neglect in this age of telegraphs to have obtained information easily acquired, that works injury to rational medicine and those who try to practice it.

If this view of this case should seem so objectionable that the professor may claim that it was done ignorantly, what is the justification for knowingly teaching students—professedly irregular—who may consistently claim consultations at least in the practical branches taught them only by the regular faculty?

If this is a sample of the "younger blood of the medical department," promised us at the State society, and through the newspapers, let us go back to the old, or have transfusion of some better blood. Spare us any transmission of this.

M. D.

Calhoun County, February 21, 1876.

MORE OF HOMEOPATHY IN THE UNIVERSITY AS SEEN BY STUDENTS.

Editors Review:

We had not intended to quite extinguish our class-mates in our reply in your January number, to their little statement in the November number of the *Peninsular Journal.* Much as they try to put a brave face on it, we happen to know that many of them would be glad to enter the profession under better auspices, but think their necessities compel them to submit to the exigencies of the circumstances under which they unwittingly find themselves. While some poor fellows who were tempted into the list of candidates for graduation, by the ease with which that terrible "preliminary examination" was passed, and who are not sure about the "final," are wondering, if they fail, whether homeopathic candidates of only equal attainments with themselves in the branches in which they are examined in common, can be prevented from graduating, providing they pass satisfactory examinations before their homeopathic professors? And if not how are the faculty to make "better homeopathic doctors," and thereby "benefit humanity." While our homeopathic half-brothers, good and ill, are feeling jubilant by reason of the "two strings to their bow," and are claiming, and apparently with good reason, that in cases of surgery, gynecology, and diseases of children, the faculty—and if they, why not the profession—cannot refuse to recognize and consult with them after furnishing them all the information they get on those "fundamental branches," as well as the certificates, by aid of which they obtain their diplomas.

We hope the friends of the old college, may yet be able to say truthfully, what it cannot now say, "no connection with the concern across the way," notwithstanding the recent assertion of a member of the literary faculty, in what purports to be an authentic history of the university in a popular magazine.

By the way, it is spoken of by older students and others as remarkable that in giving the names of the earlier faculties who aided Dr. Tappan in developing the university, though some are mentioned who could only have been connected with the University a year or two before Dr. Tappan's removal, the name of the venerable and distinguished Prof. Sager, one of the earliest members of any faculty, and one of the founders of the medical department, and one of the largest contributors to its museum, does not appear.

This significant omission by a homeopathic patron, together with the inaccuracy of the relations of the two colleges, seem to indicate one of the objects of the paper; and which seems also in keeping with much of the policy of the faculty and the university authorities, to influence the profession on professional topics by opinions of laymen, and appeals to the public.

The professor of surgery requested us to look in the November number of the *Journal* as we would find his views there editorially expressed. And by the way, the various "views" we have had, in the faculty statement, the explanations of different members of the faculty to the class, and the explanations of their explanations, followed by the faculty editorials of the *Journal*, are somewhat confusing.

The professor says: "The tide of public professional opinion has undoubtedly taken, as they always hoped and believed it would, a decidedly favorable turn." Small favors in the way of a "turn" seem to be thankfully received.

The discussion of the subject seems to drift naturally into nautical phraseology, perhaps because of the new water works, which it is suggested were erected to facilitate the "dilutions" for a homeopathic hospital.

But while their "Bark is on the Sea," we would remind the faculty that "There is a tide in the affairs (of colleges as) of men, which taken at the flood leads on to fortune, omitted," etc. We trust they will take advantage of the favorable turn "to tack"—not "give up"—"the ship," if they can keep its guns from doing service for the enemy, and don't have to fly but one flag. The old craft has a sound keel, and seems stanch enough when well manned and managed. But they should look out for barnacles. And if she were copper-bottomed and iron clad, with a revolving turret for the crew, she never could win honor between two fires, even if she kept afloat. But the best of ships may be overloaded, and just now her greatest need seems to be a "Plimsoll's line" painted on her hull, broad enough for even regents to see when they have freight enough. This, together with weather signals, the underwriters of the profession could insist on; and if disregarded by the skippers or owners, it is well that they should all be in the same boat together.

Though it would be sad if she should, having

"Stood the storm when waves were rough,
Yet in a sunny hour fall off,
Like ships that have gone down at sea,
When heaven was all tranquillity."

Even "rats leave a sinking ship," students cannot be credited with less sagacity.

INDEPENDENT STUDENTS.

University of Michigan, February 19, 1876.

COMMENTS ON SOME RECENT EDITORIALS IN THE PENINSULAR JOURNAL.

Ann Arbor, February 15, 1876.

Editors of the Review:

Gentlemen—It is only from a sense of duty that we beg the use of your columns to refute certain editorial statements that have appeared in some recent numbers of the *Peninsular Journal.* But the editorials of that journal are of a very doubtful paternity, since the dean of the faculty and the professor of surgery seem to be joint claimants of the honor, with the avowed editor. It is to be regretted that gentlemen occupying their position should deem it more indicative of moral courage, more consistent with professional dignity and honor, to conceal themselves behind the editorial shield, than to express their views openly over their own signatures. But, whether in this discreditable manner they desire to shirk the responsibility of their statements, or from perhaps a pardonable weakness they seek every opportunity either to defend their own delinquencies or to eke out the feeble, vacillating and equivocal laudation the voice of the profession has hitherto accorded them, they will probably find that temporary advantages thus gained are always ephemeral, and the recoil no less certain than fatal.

We are led to make these remarks in consequence of some statements in the December and January issues of the *Peninsular Journal*, seeking to impugn, by deliberate misrepresentation, our motives and conduct in tendering our resignation of the office of dean of the faculty.

The greater part of the editorial in the December number is now, we think, confessedly from the pen of the dean of the faculty, while the latter, from its intensely unfair and discreditable character, may be presumed to owe its paternity to the avowed editor; yet, presuming that his intimate relation to the faculty may have resulted in precocious development, perhaps we should humbly accept the *ex cathedra* lessons on ethics he condescends to read us, although the first semi-decade of his professional life is barely turned.

On re-perusing it, we find in the dean's part of the editorial of the December issue of the *Journal*, some passages that were previously overlooked, and which we desire to bring to the notice of your readers. He asserts that "two of the veteran professors (Drs. Palmer and Ford) were out of the State at the time of these occurrences, and knew nothing of the matter until all these arrangements were accomplished." In addition to the evidence before adduced, showing that these two "veteran professors" were present at a meeting of the faculty about the middle of March, when a proposition was made also by a "veteran professor," and supported by Dr. Ford, we would refer to the action of the Board of Regents, on the 17th of February (during term time), sitting with open doors, and generally attended by some members of the faculty, proving conclusively that some action of the Legislature was impending, and which was encouraged by the Board of Regents, Dr. Rynd acting as chief fugleman. We quote from the minutes of that meeting of the Board, viz: Regent Rynd "reported that the committee on the medical department, to whom were referred various papers on the subject of homeopathy, and also a copy of a proposed Senate bill, asking an appropriation of five thousand dollars for the establishment of such department, * * * would respectfully report, that we will, if so desired by the Legislature, manage the affairs of such homeopathic college as may be established, to the best of our ability," etc. "In this connection we feel it incumbent upon us, however, to suggest that the sum asked for is more than sufficient to pay the salaries of two professors during a four months' course, as contemplated in the bill," etc.

With these facts before them, we leave it to the judgment of the profession, whether these "veteran professors" were as ignorant of what was impending, and likely to be effected, as they claim—whether, in fact, this action of the Board of Regents did not foreshadow events in harmony with the action, which actually transpired but a few weeks later.

Furthermore, that the action of the regents, by which "all was completely accomplished," was not wholly unlooked for by the dean, we infer from the following extract from a letter written from Maine on the 15th day of May, just three days after the enactment of the plan of organization of the homeopathic attachment:

"I can but feel that there has fallen upon the University the deep disgrace we have for the last twenty years labored to avert, and, from some expressions I heard before leaving home (20th April—a few days before the legislative act was passed), I fear by the full consent, and, probably, connivance of some who ought to have had more sense and principle, and who should be held to all the responsibility which was assumed by the faculty and the profession.

"While I look with much apprehension to the future, for the honor of the University and the success of the medical department, I shall do what I can to preserve both, while I shall not disregard my own professional honor and consistency."

Does it not seem evident from these facts and the foregoing statement, that the dean not only had foreknowledge of the coming events, but had made up his mind thus early to accept the situation, and would, if he had been present at the meeting of the committee of the board, like the other members of the faculty, have "interposed no serious objections."

Would it be uncharitable to assume that the connivance above alluded to, had reference to the two members of the faculty who at the March meeting of the faculty had advocated the admission of homeopathy into the medical department of the university?

Again in the same editorial, the dean seeks to cast some implied censure upon the writer for having "made no protest, offered no suggestion, said not a word until long after all was completely accomplished, and certainly, he of all others was not the man to complain as he has done that no protest was upon the records of the faculty."

We have shown in the February number of the Review, that these statements were wholly without foundation, in fact, that prior to the enactment of the "homeopathic plan" by the board, we had urged our objection to the faculty, and offered them for publication by the secular press a week previous to the meeting of the regents, that at the earliest possible moment they were offered to the *Peninsular Journal* and published therein, and that for several weeks prior to the complete accomplishment of this matter we had tendered our resignation, setting forth our objections in full to the plan of organization. We may add that in a friendly and courteous interview with the president, about a week after the meeting of the board (spoken of by the courteous? editor of the *Journal*, as the interview "at which occurred *the injudicious and questionably proper action of a representative of the board*, who disagreeing with Dr. Sager, undertook to dictate to him"), we intimated our intention of resigning. This the president kindly requested me not to do, saying it might embarrass the action of the board at the present critical juncture. To this we frankly replied that if by so doing we could prevent the final consummation of the plan, it would be the most valuable service we had ever been able to render the University. We need not add that neither the character of president Angell, nor the occasion, nor our relations to him, would for a moment justify even the suspicion of any attempt to dictate to me as to my proper line of duty. He merely expressed the apprehension that the publication of my protest might bring me into unfriendly relations with the Board of Regents.

Moreover, let it be borne in mind that the practical adoption of the homeopathic plan would in no wise have directly affected us as dean of the faculty. We should not have been called upon to take any part in the teaching, examining or certifying to the qualifications of a class of students known as candidates for the homeopathic degree, as do the members of the teaching faculty. We should not have been called upon even to recognize their existence as a part of our official duty, but we were unwilling to occupy a position as the official head of a faculty that chose to recognize homeopathy, or that implied an approval of the plan of organization of this or any other form of charlatanry.

In reference to our motives for offering our resignation, it may be desirable to place on record the unsolicited opinions of at least two of the medical faculty. In writing to a friend, Dr. Dunster says: "I am inclined to think Dr. Sager will resign his deanship and have nothing to do with it, for he is unquestionably conscientious in his belief about it; he thinks it is wrong to stay in an institution where such heresy is admitted."

And from Dean Palmer, "I regret exceedingly the state of things in the University, and that you have felt the necessity of resigning your position. Still I have no word of censure—only regret."

In the issue of December 11th of the *N. Y. Medical Record* we find an indignant denial by Prof. Palmer of a charge previously published in the *Record*, that he (Dr. Palmer) had said, "with Dr. Sager it was a question of only two hundred dollars, while with us (the faculty), it was a question of eighteen hundred dollars," yet in the dean's part of the editorial of December of the *Peninsular Journal*, we find the idea substantially reproduced: "All excepting Dr. Sager, who two years before had retired from active duty as a teacher, and received a salary of only two hundred dollars," thus obviously suggesting the other term of the comparison, the eighteen hundred or two thousand dollars salary for a six months course of the teaching faculty, showing that ideas that lie near the surface are apt to crop out from very slight causes of denudation.

But in view of the nearly unanimous expression of disapprobation of the course of the faculty by the professional press, and the vacillating course of the small number of journals that feebly support them, as well as from other indications that crop out here and there, we suspect the faculty will make some effort at this late hour, and under the stress of adverse professional opinion, to induce the Board of Regents to back down from the imperious and dictatorial attitude, assumed by the leader in this matter, Dr. Rynd (himself perhaps not without anticipated personal reasons), and an attempt may be made to repeal some of the slighter objectionable features in the hope that the profession will be deceived by some slight concession—while still leaving the faculty in the humiliating position of "adjunct professors" of a college of homeopathy, and requiring them as heretofore, to furnish the major part of the curriculum of study and credentials of the homeopathic candidate for the degree of homeopathic doctor of medicine.

Respectfully,

A. SAGER.

Condensations from our Exchanges.

PRACTICE OF MEDICINE AND THERAPEUTICS.

Whooping-Cough Treated by the Iodide of Silver.—Dr. R. Bell (*London Obstetrical Journal, Dec.*, 1875), reports the results of one hundred cases of whooping-cough treated with the iodide of silver. In almost every case the cough lost its whoop at the end of four weeks, and the patient was quite well in six weeks. Further, the usual complications of the disease were very rare. The doctor suggests that the disease is located in the gastric periphery of the pneumogastric nerve, and that the silver salt acts as a sedative to this morbidly sensitive nerve, preventing reflex irritation. Dose is one-eighth of a grain thrice a day.

Small-Pox—Value of Photography in its Diagnosis.—Dr. Vogel (*London Lancet*, Oct., 1875) says that by photography an eruption of small-pox was made evident twenty-four hours before it actually came out, although the naked eye could detect no eruption on the face, the naked plate showed stains which exactly resembled the variolous exanthem, and in twenty-four hours the eruption became clearly evident.

Scarlet Fever—Doubts Respecting our Present Hygienic Views.—Dr. D. Davies (*Brit. Med. Jour.*, December 4, 1875) doubts the value of our present creed and practice respecting the prevention of scarlet fever. Our preventative measures are very unsatisfactory and inefficient. When successful, the child escapes only to be attacked and probably carried off later in life during a malignant epidemic. Life and suffering would be saved if all children were exposed and attacked during a mild epidemic at the most favorable season of the year. The doctor believes, for these and other reasons, that it would be better to allow entire families to pass through the disease during a mild epidemic, and at the best season of the year. By chosing the type of disease and the season of the year, the disease would be shorn of its greatest terrors.

Scarlatina Anasarca Treated by Bleeding.—Dr. Bramwell (*Edinburgh Med. Jour.*, July, 1875) says that when the ordinary cathartic and sudorific remedies fail to relieve the anasarca of scarlatina, the abstraction of blood will act most beneficially. Ten ounces must be taken from a boy ten years old. No thought of anæmia should deter us from this treatment. These patients are not anæmic at all, but are suffering from an acute disorder associated with a very different condition of blood from that existing in chronic renal disorders. Depletion acts like a charm in the convulsions of acute uremia,—free diuresis speedily follows its employment unaided by any other remedies.

Diphtheria—Its Relation to Parasites.—Dr. M. L. G. Duchamp (*Le Mouve-Med.*, *The Doctor*, November, 1875) conludes some original experiments as follows:

1. False membranes of croup transferred from the larynx of man into the larynx and trachea of the rabbit can give origin to the diphtheritic process.
2. In the absence of false membranes the products (bacteria, vibriones, etc.) collected in the larynx of a man suffering from croup and transferred to that of the rabbit appear to lose that peculiarity whilst they are very noxious.
3. The injection of false membrane from the larynx of man into the jugular vein or cellular tissue of the rabbit appears to constitute an unfavorable means of reproducing the diphtheritic process—all the animals thus experimented with dying of some form of septicæmia.
4. Reinoculations appear to weaken the noxious effect of the virulent elements.
5. In the absence of false membranes, the products collected in the larynx of man and put under the epidermis of the rabbit, did not provoke the diphtheritic process in the latter animal.

Enteric Fever—Is it ever Spontaneously Generated?—Dr. C. B. Fox (*Brit. Med. Jour.*, August 28, 1875) reports twenty-seven cases of enteric fever, observed in out-of-the-way country places. Special attention was given to the study of their etiology. His experience shows:

1. That enteric fever is sometimes spontaneously developed.
2. That it spreads by contagion in the overcrowded, dirty dwellings of the poor, whilst it is rarely transmitted from the sick to the healthy in capacious, airy houses where cleanliness in all things is the rule.
3. That the immunity in the latter case is ascribable to the prevention of air, water and food pollution by the poison, and to the dilution of the poison, and perhaps its destruction, by the natural or artificial disinfectants if the air be impregnated therewith.

Contagion—Its Nature.—Dr. H. J. Maclagan (*Brit. Med. Jour.*, August 28, 1875) after a full review of the demonstrated facts respecting contagion, regards the following as the best explanation of these facts:

Contagion consists of minute living organisms, probably of albuminous composition, possessing the power of organic development, always reproducing their own kind, capable under favorable circumstances of preserving their vitality for a considerable period, but speedily perishing when separated from these conditions and freely exposed to the atmosphere.

INTERMITTENT FEVER TREATED WITH NON-NAUSEATING DOSES OF IPECACUANHA.—Dr. A. A. Woodhull (*Atlanta Med. Jour.*, June and July, 1875) reports twenty-three cases of intermittent fever successfully treated by the administration of ipecacuanha in non-nauseating doses. The dose varied from one to twenty grains every three or four hours. He thinks, from his experience, that the most efficient dose would be from one to two grains every three or four hours. In large doses it is necessary to give small doses of opium, and to observe the precaution of recumbent rest and abstinence. In one-grain doses, abstinence from fluid is all that is necessary. This method succeeded in cases in which quinine failed to check the fever.

MALARIA—ITS NATURE, CAUSE AND PREVENTION.—Dr. B. H. Riggs (*Transactions Med. Soc. of Alabama*, 1875) summarizes a report on this subject thus:

1. Malaria is due to vegetable organic germs or spores.
2. These grow and multiply in a damp soil with superficial ground water which has been exposed to a heat at and above that of summer temperature, and which contains in solution more or less vegetable matter. Too much water in this process is as fatal as too little water.
3. These germs are heavier than atmospheric air; their vertical spread is short, varying from thirty feet to one thousand; their horizontal spread does not often exceed five hundred yards.
4. A sure way to prevent the growth of malarial germs is to keep the ground dry, lower the level of the ground or sub-soil water. As surely as vaccination will prevent small-pox, so surely will a thorough system of sub-soil drainage prevent malaria.

YELLOW FEVER POISON—ITS MODUS OPERANDI.—Dr. Sternberg (*N. O. Med. and Surg. Jour.*, July, 1875) adduces a large amount of evidence to prove that:

1. The disturbance of the sympathetic nervous system is the first and essential effect of the yellow fever poison.
2. We have no evidence that blood changes occur prior to the implication of the sympathetic, which marks the outbreak of the disease.
3. The action of the poison upon the sympathetic seems to be a paralyzing one, causing arrest of functions, and producing phenomena similar to those following division of the sympathetic in any part of the body.
5. Whether the blood is also primarily affected by the poison, or whether the changes in it are all secondary to arrest of the processes of nutrition, secretion and excretion may be considered a question still *sub judice*.

In treatment, the doctor suggests the use of ergot hypodermically.

SODIC SULPHO-CARBOLATE—ITS INTERNAL ADMINISTRATION IN THE TREATMENT AND PREVENTION OF INFECTIOUS DISEASES.—Dr. Brakenridge (*Lond. Med. Record*, October 15, 1875—*Med. Times and Gazette*), to ascertain the value of sulpho-carbolate of soda, carried out two sets of clinical observations:

1. The salt was administered in doses of from twenty to thirty grains every two hours to patients suffering from scarlet fever. Fifty successive patients were treated, all recovering. Ninteen were males, and the rest

females. Average age was 17.5 years; average duration of the disease before treatment was commenced, 4.4 days. In three cases only were there sequelæ, and in these the treatment was not begun till very late in course of the disease. In contrast with these results, the author says that, of the twenty-four patients treated in the ordinary manner just preceding these cases for scarlet fever in the same wards, no fewer than six died.

2. Concerning the prophylactic virtue of the sulpho-carbolate when given to healthy persons exposed to scarlet fever, diphtheria and measles, the doctor says: It was given in seven families to twenty-two individuals exposed to the poison of scarlet fever; in three families exposed to the poison of diphtheria; in three families to eight persons exposed to the poison of measles. The dose varied according to age, from five to thirty grains, three or four times a day, or more frequently when well borne. In not a single instance did the disease extend beyond the individuals first affected.

OBSTETRICS.

Dry Cupping in Obstetrics.—Dr. B. H. Washington (*Atlanta Medical Journal*, December, 1875) affirms that,

1. Dry cupping applied for from five to ten minutes on the sacral portion of the spinal column, will produce relaxation of the os uteri and external parts.

2. Dry cupping next applied (while the lower cup is still on) above the first cup will produce contractions of the fundus uteri, and that often so as to secure delivery in even less than thirty minutes.

Fœtal Diagnosis.—Dr. Frank Wilson (*American Practitioner*, December, 1875) reports an analysis of a second series of one hundred and six cases. Of those whose hearts beat from 110 to 125, there were thirty-five males and two females; from 125 to 130, thirteen males and two females; from 130 to 134, eight males and four females; from 134 to 138, five females and two males; from 138 to 143, seven females and two males; from 143 to 170, twenty-four females and two males. Thus it would seem that at least a shrewd guess might be made as to the sex of the child.

Kristeller's Method of Delivery.—Dr. A. Graettinger (*Transactions Wis. Medical Society*) describes this method as follows: The physician stands at the side of the parturient woman, who is placed on her back. He uncovers the abdomen, isolates the womb from the neighboring organs by gently displacing the intestinal convolutions, and rectifies any obliquity of the womb by bringing its long axis into coincidence with that of the pelvic brim. Now he grasps the uterus with his hands in the following manner: His fingers point to the pelvis; his palms are applied to the fundus of the uterus or upper portions of its sides; his thumbs to its anterior wall, his fingers spread not too far apart; try to reach the posterior wall. Then, after gently rubbing the parts grasped, he commences to press slightly downwards, increases the pressure gradually, keeps it at a certain height from five to eight seconds, and diminishes it gradually. After an interval of from one to three minutes, he commences again. He may change the places of pressure. The os not being much dilated, the pressure should be applied to the upper portions of the sides of the uterus, but the os being dilatable or completely dilated, to the fundus. These compressions are to be repeated from ten to thirty times. In difficult cases the physician may pause for ten or fifteen minutes after ten or fifteen compressions. Towards the termination of the birth, they should be made in more rapid succession. If a marked effect is not produced by the above number of compressions, they should be stopped. This method is applicable to all cases of tedious labor, in breech presentation, which linger after they have progressed too far to bring down a foot. The doctor reports several successful deliveries by this method.

ACCIDENTAL CONCEALED HEMORRHAGE.—Dr. John Burnton (*London Obstetrical Journal*, October, 1875) reports five cases of this rare complication of pregnancy just preceding delivery. The chief diagnostic symptoms are:

1. Sudden fainting and collapse, with blanching.
2. Continuance till delivery, more or less, of the same, but such as to cause great alarm to the medical attendant.
3. The intense continuous stretching pain, which patients describe as bursting.
4. The tense state of the membranes, if unruptured; also continuous.
5. In most cases the existence of all the symptoms of excessive bleeding without external manifestation, by the presence of discharge of blood from uterus.

As to the immediate cause of concealed uterine hemorrhage, Dr. Brunton found that in twenty cases, six began with sudden spasms, producing, possibly, an irregular or partial contraction of the uterus. Eleven were due to subjective violence, as violent exertion, sudden missing of a step, cough and the like. Three only were due to external violence. Of all recorded cases (39) 19 died and 13 recovered. The indication in treatment is to empty the uterus as soon as the condition of the woman will permit.

INVOLUTION OF THE UTERUS.—Dr. A. Serdukoff (*London Obstet. Journal*, October, 1875), from investigations in a large number of cases, concludes:

1. Involution of the uterus goes on more rapidly during the first few days of the puerperal period than it subsequently does.
2. Involution of the uterus of healthy women goes on well and with regularity.
3. Involution, when the uterus is the subject of disease, such as metritis, endo-metritis, or parametritis goes on more slowly, and this varies with the amount of the disease.
4. Permanent contraction, which takes place during the first few hours after delivery, is a common occurrence. When it passes off, an increase in size begins to take place.
5 In women delivered at the full time, involution goes on more quickly and regularly than in those prematurely confined.
6. Length of labor retards involution.
7. In primiparæ, involution of the uterus goes on very regularly but more slowly than in young multiparæ. In aged multiparæ involution does not go on so well.
8. In women who suckle their children, involution during the first four days does not go on so quickly as in those who do not nurse. But subsequently the involution is quicker though less regular.
9. After-pains are not necessary for a favorable involution; in fact, we are as well without them.
10. Super-involution and sub-involution occur as distinct, uncomplicated pathological conditions.

SYPHILITIC PLACENTA.—Dr. A. Macdonald (*London Obstetrical Journal*, October, 1875) from the careful study of two undoubted specimens of this disease, concludes:

1. A large number of intra-uterine deaths from diseased placenta are due to the existence of constitutional syphilis in either or both parents, and the death is the result of progressively increasing defective blood supply.

2. The changes in the placenta give the organ a pale appearance, and increase its size, and in consequence the appearance it presents is liable to be mistaken for fatty degeneration. This mistake is easily prevented by microscopical and chemical examination of the diseased organ.

3. The bones of the dead fœtus will (as they will show osteo-chondritis syphilitica, if the constitutional be present) afford a valuable and infallible means of deciding whether the corresponding placenta is syphilitic or not.

4. Medicines thought to be beneficial by their action upon the blood, as oxygen given in such cases, most probably are useful if they really do good as blood depurators, and may be beneficially replaced by iodide of potassium and other accredited anti-syphilitic measures.

5. On the whole, there is little good to be expected from premature labor in such cases, as the child, though born alive, is saturated by the disease. We may expect better results by anti-syphilitic measures acting through the mother on the placenta and the child at the same time.

THE OVUM IN ABORTION—HOENING'S METHOD OF REMOVING.—Dr. Paul F. Mundi (*American Obstetrical Journal*) states this method as follows: Hoening recommends to express the ovum either entire or in part if the fœtus be removed by bi-manual compressions, two fingers of one hand being introduced into the vagina and passed as far up as possible into the fornix vaginæ, and the other grasping the uterus through the abdominal parietes, thus firmly compressing the organ between the fingers of both hands, and slowly and surely expelling its contents. If the uterus is anteverted or anteflexed, as is usual during the earlier months of pregnancy, the two fingers should be passed into the anterior cul-de-sac, or the corpus uteri may be firmly pressed against the symphysis pubis by the external hand alone (the bladder having been emptied). If the uterus is retroflexed, the two internal fingers go behind the cervix. The relaxation of the abdominal parietes in multiparæ usually renders the seizure of the uterus by the external hand an easy matter. The facility and rapidity with which the expression of the ovum is accomplished is surprising and gratifying, as also the absence of subsequent hemorrhage or puerperal trouble. The pressure in the uterus need not, and never should be, sufficient to do harm.

PREDICTION OF SEX OF FŒTUS IN UTERO.—Dr. James Cumming (*Edinburgh Medical Journal*, November, 1875) reports one hundred and twelve cases in which he had carefully ascertained the number of fœtal pulsations before birth, and compared it with the sex and weight of the child after delivered. He fairly reaches the following conclusions:

1. The indications resulting from auscultation of the fœtal heart are of a certain value in aiding us to diagnose the sex of the fœtus in utero, but cannot solely be relied upon.

2. There seems to be a relation (or ratio) between the weight and the pulsations of the fœtus in utero.

3. For the weight per pound the pulsations are slower in the male than in the female.

4. There is no relation between the fœtal and maternal pulse.

PHYSIOLOGY.

CAFFEINE—ITS ACTION.—Dr. J. Peretti (*Centralblatt, f. d. m. Wissensch.*—*Clinic*, January 29, 1876) has recently made some very accurate experiments with caffeine upon animals. He found that after he had injected five-tenths of a grm. of caffeine into a dog weighing twenty-seven hundred grms., the increase of temperature amounted to 2.5° F. This effect was not of long duration. During the rise of temperature the animals were in a state of muscular tension. From this, Peretti argues that the elevation of the body heat is probably due to a direct excitation of the cord, and the consequent increased innervation of the motor apparatus. The pulse is accelerated, the secretion of saliva profuse, and the sensorium excited. Respiration is quickened, and may be paralyzed by lethal doses. He confirmed the observation of Uspensky, that death can be obviated by artificial respiration. Where the dose was so large as to produce paralysis of respiration, there was neither muscular rigidity nor elevation of temperature. Spasms did not occur in those animals in which artificial respiration was kept up, not in curarized frogs, and not in extremities whose nerves had been divided. Caffeine seems indicated as an antidote in poisoning by alcoholic spirits.

LOBELINA—ITS PHYSIOLOGICAL ACTION.—Dr. Isaac Ott (*Medical Times*, December 11, 1875) has made further experiments to determine the action of lobelina. Former experiments proved that it was an excitant of the peripheral vaso-motor system. These now before us lead to the following conclusions:

1. Lobelina, like nicotina and conia, paralyzes the motor nerves.
2. It does not destroy the functions of the sensory nerves or the striated muscles.
3. Lobelina, nicotina and conia depress the excitability of the spinal cord.
4. It destroys voluntary movement and coördinating power.
5. It temporarily decreases the pulse, followed by a subsequent increase often beyond normal. Nicotina does the same.
6. This action on the pulse is due to an action on the cardio-motor ganglia, provided that atropine paralyzes the cardio-inhibitory ganglia.
7. Lobelina, nicotina and conia temporarily decrease the pressure, followed by a rise much beyond normal.
8. This increase of pressure is due either to a peripheral vaso-motor action, or to an excitation or the spinal vaso-motor centres.
9. Lobelina, nicotina and conia paralyze the pneumogastrics.
10. In large doses it paralyzes the vaso-motor centre, both to direct and to indirect irritation.
11. Lobelina, nicotina and conia accelerate the respiratory movements.
12. After section of the vagi, lobelina and conia cause no increase of respiratory movements.
13. It increases and then decreases the temperature. Nicotina and conia decrease the temperature.

DATURINE AS A MYDRIATIC.—Dr. Fano (*Jour. d'Oculistique—London Medical Record*, December 15, 1875), from numerous cases, deduces the following results:

1. With a solution of daturine (one part to three thousand) dilatation of the pupil of a healthy eye is obtained in from twenty to twenty-five minutes.
2. The action of daturine is as prompt as that of atropine, the two solutions employed being of equal strength.
3. The instillation of a daturine collyrium (one in six hundred) produces mydriatic effects at the end of twenty-five minutes, and in young subjects in a shorter space of time.
4. The instillation of an atropine collyrium produces mydriatic effects rather more promptly than the instillation of a daturine collyrium.
5. If in vasculo-plastic keratitis, accompanied by a non-dilatable state of the pupils, daturine be inefficacious in bringing on this dilatation, the atropine also remains ineffective.

6. But in these same kinds of keratitis, daturine sometimes produces dilatation of the pupil when atropine has not exercised any action of the kind.

7. If the daturine collyrium do not produce dilatation of the pupil in certain cases of vasculo-plastic keratitis, in which the mydriatic effect of the atropine is also not more appreciable, the daturine seems to exercise a special action over the corneal vessels, which diminish in size under the influence of the stramonium alkaloid.

8. The daturine collyrium therefore appears superior to atropine, in certain cases of chronic and vasculo-plastic keratitis.

ALCOHOL—ITS PHYSIOLOGICAL ACTION.—Dr. T. Lauder Brunton (*British Medical Journal*, December 25, 1875) gives the following as the result of his observations concerning the physiological action of alcohol:

In small quantities it increases the secretion of gastric juice and the movements of the stomach, and thus aids digestion. Although unnecessary in health, it is useful in exhaustion and debility. It increases the force and frequency of the heart, by acting reflexly through the nerves of the stomach. In large doses it impairs digestion, by precipitating pepsin and over-irritating the stomach. It may produce death reflexly by shock. After absorption into the blood, it lessens the oxidizing power of the red blood corpuscles. This property renders it useful in reducing temperature. When it is constantly or very frequently present in the blood, it causes accumulation of fat and fatty degeneration of organs. It undergoes combustion in the body, maintains or increases the weight of the body, and prolongs life on an insufficient diet. If large doses are taken, part of it is excreted unchanged. It dilates the blood-vessels, increases the force and frequency of the heart, imparts a feeling of comfort, and facilitates bodily and mental labor. It does not give additional strength, but merely enables a man to draw upon his reserve energy. It may thus give assistance in a single effort, but not in prolonged exertion. The same is the case with the heart, but in disease alcohol frequently retards rather than quickens this organ, and thus economizes instead of expending its reserve energy. By dilating the cutaneous vessels, alcohol warms the surface at the expense of the internal organs.

It is thus injurious when taken during exposure to cold, but beneficial after the exposure is over, as it tends to prevent congestion of internal organs. The symptoms of intoxication are due to paralysis of the nervous system, the cerebrum and cerebellum being first affected, then the cord, and lastly the medulla oblongata. The apparent immunity which drunken men enjoy from the usual effects of serious accidents, is due to paralysis by the alcohol of the nervous mechanism, through which shock would be produced in the sober condition.

URINE OF NEW-BORN INFANTS.—Biedermann (*Centralblatt fur Med. Wissenschaf.—Medical Times*, July 31, 1875), from examination of the urine of seventeen male children during the first ten days of life, reaches the following results:

1. The first discharge of urine is very rarely immediately after birth—usually at the end of the first day, often not until the second or third.

2. The average quantity of the first evacuation of urine is eight cubic centimetres.

3. During the next ten days the amounts of urine discharged are not constant, varying from twelve to sixty-one cubic centimetres.

4. The color of the fluid on the first day corresponds to Nos. 1 and 2 of Vogel's scale; on the latter days the urine becomes gradually almost as light as water.

5. The reäction is almost always moderately acid, very rarely neutral; for if not acid, it has usually a marked tendency to alkalinity.

6. The specific gravity of the first urine averaged 1010.5.
7. The specific gravity during the entire ten days varied from 1002.7 to 1010.
8. In the urine of each of the children, albumen was noticed on one or more days.
9. Chlorides were found in all the evacuations.
10. The average amount of urea was .321 per cent.
11. Uric acid was constantly present in the first urine, and increased in quantity until the third day, when a diminution took place.
12. Under the microscope, the urine of the first day, and that of the following days until the fourth, was found to contain epithelium from the urinary tract in large amounts, varying quantities of epithelium from the uriniferous tubules, and masses of uric acid crystals.

Salicyl—Its Transference from Mother to Fœtus.—Dr. Benicke (*Allgemeine Wiener Med. Zeitung—British Medical Journal*, December 25, 1875) gives the results of some experiments made by administering to twenty-five pregnant women salicyl in doses of half a drachm shortly before labor. The newly born children and mothers were catheterized, and the urine examined for salicyl. He found:

1. The interchange between mother and fœtus was very rapid. The salicyl was always given as soon as labor pains began. In two cases, where the birth took place at the end of ten or fifteen minutes, no salicyl was found in the children. In two other cases, where the children were born forty to eighty-five minutes after the commencement of labor, no salicyl was found at first, but it was present in the urine examined some hours afterwards. In all the other cases, salicyl was found in the children's urine immediately after birth. In these cases the shortest duration of labor was two hours. Thus salicyl had passed into the organism of the fœtus in forty minutes, and had appeared in the urine in two hours.
2. The tissue change in the child was more active immediately after birth than in the uterus. This was shown by the stronger evidence of salicyl in the urine obtained a few hours after birth than in that removed immediately after birth.
3. Salicyl ceased to be found in the mother's urine at the end of twenty-four to thirty-six hours; in the child's urine it was found up to the third or fourth day. The liquor amnii was obtained in a pure state in four of the cases, and was found to contain no salicyl, nor was salicyl found in the liquor amnii of several women to whom it was given from six to fifteen days before labor, although it was detected in the urine of children.

SURGERY.

Testicle Amputated by the Patient Himself.—Dr. A. Ansell (*Amer. Med. Weekly*, November 18, 1875) reports the following remarkable case: A man, from a syphilitic ulceration of scrotum, had his right testicle exposed. The physician attending him tried to give him ether in order to remove the organ, but having failed, the patient became desperate. Dismissing the doctor, he drew out the testicle as far as he could, and cut it off with a razor. He bled fearfully, but stopped it with a hot iron. For the rest, cold water effected a cure in twenty-three days. Five fistulous openings remained, which were cured by filling each with nitrate of silver. The result was a perfect success.

Femoral Aneurism Cured by Direct Compression while the Patient was Taking Active Exercise—Death from Peritonitis.—Dr. B. Brown (*Boston Med. and Surg. Jour.*, October 21, 1875) reports a case of femoral aneurism treated and cured by direct compression. The treatment was commenced while the patient was in a recumbent position, but during its progress and completion he was taking active exercise, and attending for the greater portion of the time to his business, walking and riding to his store, etc. To keep up the continuous pressure while walking, the following method was devised: A wide, strong, firm leather belt was made, thoroughly padded, which was fastened tightly round the hips. To this was attached a strap passing from behind the trochanter to buckles over Poupart's ligament; a pad was adapted to the tumor—hard, oblong and convex, with a block-tin back. This pad was held in position by the strap passing through loops to the buckles. By these means a considerable force could be applied to the aneurismal tumor. The tumor did not entirely close until about five years after the treatment was commenced. So fully had the circulation been established by anastomosing of the smaller vessels, that the shock attending its entire closure was slight.

NEW METHOD OF CONTROLLING THE VELUM PALATI AND ENLARGING THE PHARYNGO-BUCCAL APERTURE IN RHINOSCOPIC EXPLORATION.—Dr. P. S. Wales (*Med. Record*, November 27, 1875) uses an elastic cord to overcome the contraction of the palatal muscles. An india rubber cord of two millimeters in diameter is selected. One end is introduced into each nostril until they both reach the lower portions of the pharynx. At this moment the patient is directed to cough. The force of expiration will pretty surely project them into the mouth, when they may be seized by the fingers and drawn externally until the middle portion of the cord which is external is arrested against the nasal septum. Gentle traction is continued until the soft palate is well drawn forwards, when the threads are passed up over the ears and downwards beneath the chin, and there tied. The pressure upon the palate can be increased at will by drawing upon the cord, and so the palatal contraction is entirely overcome. In this way the area of the pharyngo-buccal space may be made large enough for the largest mirror.

SYPHILIS IN ITS INFLUENCE UPON TRAUMATISM.—Dr. L. H. Petet (*Brochure Archiv. Dermatology*, July, 1875) publishes a valuable account of Verneuil's studies concerning the influence of syphilis upon various traumatic lesions:

1. In subjects affected with severe syphilis, or who in an ordinary syphilis have not yet followed treatment, or have been but indifferently treated, traumatic lesions may present a peculiar aspect, or be attended with an abnormal course.
2. They present these characteristics either immediately after the wound, or a few days, or a few weeks after, or even several months later.
3. This aspect varies. Sometimes the wound becomes a true syphilide; in others it ulcerates without assuming the syphilitic appearance, and does not heal; in others, finally, without ulceration, it does not cicatrize, or does so but slowly.
4. When syphilitic lesions exist at the time of receipt of the wound, the latter assumes an appearance similar to that of syphilitic ulceration in process of evolution.
5. Traumatism supervening in syphilitics in whom the diathesis is in a latent condition may induce syphilitic manifestations which are seated upon the wounded parts, or at a point more or less remote from this region, or upon a surface more or less extensive.
6. These lesions are induced as readily in the tertiary as in the secondary period.
7. Syphilis may localize itself in a region previously free from any of its accidents, either primary, secondary, or late, which has been the seat of a traumatic lesion.

8. The syphilitic affection would then be an ulceration which would destroy the cicatrix, or a tumor which would follow the usual course of a gumma.

9. Once developed, traumatic syphilitic affections have most generally the same characters, and are cured by the same treatment as are its natural manifestations.

10. In certain cases, syphilis seems to be the determining cause of the complication of wounds.

11. These complications are also capable of inducing syphilitic manifestations.

12. When a wound assumes an ulcerating appearance, or shows no reparative tendency, and without presenting the features peculiar to another diathesis, it is well to bear in mind the possibility, and administer a treatment peculiar to that disease.

13. Previous to the performance of an operation which is not urgent in particular autoplastic surgery, in a patient who a short time before had presented syphilitic manifestations, it would be prudent to prescribe mercury, etc.

14. In the event of a failure of this operation, it is well to wait for some time and to place the patient again under treatment, and not to operate until at least six months after the disappearance of syphilitic manifestations.

TREATMENT OF ANEURISMS.—Dr. C. F. Mauder (*London Lancet*, March, 1875), from his experience in treating aneurism, concludes:

1. No case of aneurism is to be regarded as necessarily incurable.
2. Some cases of internal aneurism are apparently cured by absolute and prolonged rest, restricted diet, and other medical treatment.
3. When possible, compression, either proximal or distal, is to be employed in addition.
4. In all aneurisms in which treatment by ligature is known to be a very fatal operation, the above rules are to be first applied.
5. The treatment of progressive aneurism at the root of the neck, by the distal operation, is justifiable after medical treatment has failed.
6. In rare instances only may an aneurism be treated by ligature before compression has been tried and failed.
7. Digital is to be preferred to instrumental compressions.
8. Chloroform and morphia are valuable aids to compression.

DEPRESSED CICATRICES—NEW OPERATION FOR THEIR OBLITERATION.—Dr. W. Adams (*British Medical Journal*, August 28, 1875) gives a new mode for the removal of depressed cicatrices. The several steps are as follows:

1. Subcutaneously divide all the deep adhesions of the cicatrix by a tenotomy knife introduced a little beyond the margin of the cicatrix and carried down to its base.
2. Carefully and thoroughly evert the depressed cicatrix, turning it, as it were, inside out, so that the cicatricial tissue remains prominently raised.
3. Pass two hair-lip pins or finer needles through the base at right angles to each other, so as to retain the cicatrix in its inverted and raised form for three days.
4. Remove the needles on the third day and allow the cicatricial tissue, now somewhat swollen, succulent and infiltrated, gradually to fall down to the proper level of the surrounding skin. In each of the several cases illustrating the treatment, the cicatricial tissue had lost its shiny membranous and vascular character, and become thickened and of an opaque white color, that it closely resembled the surrounding skin.

Causes of Tinnitus Aurium.—Dr. L. Turnbull (*Medical Times*), in a valuable article on the above subject, gives the following causes:

1. The pressing of a portion of altered cerumen upon the membrana tympani.
2. An elongation of the hairs of the auditory canal, passing across and interlacing with cerumen or epithelial scales, and producing a sound like an æolian harp.
3. A small quantity of adhesive mucous on the inner surface of the membrana tympani or middle ear, pharyngeal orifice of eustachian tube, or on the mucous membrane near the tube.
4. A foreign body in the eustachian tube.
5. A diseased condition of the blood, or variation in the size of some of the arteries near the ear. Tinnitus from this cause occurs synchronously with the action of the heart.
6. Large number of doubtful cases, in which there is some disease of the internal ear.
7. Immoderate contraction of the tensor tympani muscle.
8. Aspergillus in the auditory canal or on membrana tympani.

Wry Neck—Its Varieties and Treatment.—Dr. W. J. Little (*British Medical Journal*, August 28, 1875) describes three groups of cases met with in practice:

1. Those caused by rheumatic and strumous disease of the bones, ligaments, and glands of the cervical region, and by cicatrices of burns and wounds.
2. Those having a congenital origin, which exhibit more or less rigid contraction and structural shortening of one portion or the whole of the sterno-cleido-mastoid muscle, and which present considerable analogy with congenital club foot.
3. Spasmodic wry neck induced in middle life from derangement of the cerebro-spinal nerve centres. The treatment of cases due to past or present vertebral disease, and of burn and cicatrix cases, demands more or less elaborate mechanical aid, whilst those arising from congenital contraction often require subcutaneous division of one or both portions of the sterno-cleido-mastoid muscle, and the subsequent use of a common roller and plaster bandage with a leather padded collar, only made higher on the contracted side.

Trichiasis Treated by the Operation of Repositio Ciliorum.—Dr. Robertson (*Edinburgh Med. Jour.*) calls attention to the above operation as one of much value in a certain class of cases. It is an old operation, as it was known to Celsus. The principle of the operation consists essentially in causing the offending eyelashes to be mechanically turned away from the eye, and made to grow more or less in the proper direction, by making them pass under a narrow bridge of the skin. The method is as follows: A fine, curved needle has the two extremities of a very fine waxed silk ligature passed through its eye. The needle, being firmly grasped by suitable forceps, is then passed through a narrow fold of skin at the very margin of the lid, close to one of the inverted eyelashes. The point of introduction should be external to the point of emergence of the eyelash, but as close to it as possible, and the needle should be brought out after passing about ¾‴ or 1‴ under the skin. The needle and ligature should be drawn through until a small loop alone remains, when by means of a fine pair of forceps, the eyelash is passed through the loop. Traction is then made with the ligature, and the loop, with entangled eyelash, is drawn through the tunnel in the skin. The point of the needle must be introduced as near the offending eyelash as possible, lest the resiliency of the hair cause it gradually to emerge from the tunnel and resume its former position.

The operation is limited to those cases in which the inverted eyelashes are few in number and of considerable size.

Lymphatic Tumors of Neck—Their Surgical Treatment.—Dr. S. M. Bradley (*British Medical Journal*, August 28, 1875), for treating the various lymphatic tumors of neck, gives the following rules:

1. *Cases to be treated by injection of iodine.* (*a*) True hypertrophies of cervical glands without scrofula. (*b*) Strumous hypertrophies of cervical glands before they have broken down. (*c*) Hard (non infectious) lymphomata. (*d*) All encapsulated as a tentative operation.
2. *Cases to be treated by incision.* Lymphatic tumors that have either with or without previous injection of iodine broken down into pus.
3. *Cases of cervical tumors to be treated by extirpation with the knife.* (*a*) Strumous glands which form tumors riddled with soft patches, and resting on a base of suppurating cellular tissue, with a large area of blue skin. (*b*) Encapsulated tumors, which have resisted the treatment by injection.

Myopia Treated by Atropine.—Dr. Derby (*Transactions American Opthalmological Soc.*) reports thirty-six cases of acquired and progressive myopia treated by the use of atropine. He reaches the following results from an analysis of the cases and a review of the facts presented by other observers:

The emmetropic eye, through undue or disadvantageous use, acquires myopia much more frequently than has been supposed. Such acquired myopia is very apt to be progressive, commencing with spasm of accommodation, and going on through a state of congestion and irritation to the structural change characteristic of this error of refraction.

Paralysis of the accommodation by means of atropine persisted in during a period of several weeks, and furthered by rest of the eyes, shaded glasses, and, in extremely aggravated cases, local blood-letting, offers a reasonable prospect of preventing the progress of the myopia, in some instances lessening its amount, and in occasional recent and slight cases, of removing it altogether. In cases of progressive myopia, it is reasonable to expect positive results from an annual course of treatment similar to the above, carried on during those years which experience has shown to be most favorable to the advance of the myopia, thus enabling the patient to tide over a critical period. It is, perhaps, in its prophylactic action that the most importance is to be attached to the atropine treatment.

Editorial.

Seeking to be the medium through which the members of the medical profession may communicate with each other on *medical subjects*, we solicit Original Articles, Reports of Medical Societies, Observations, Correspondence, News, etc., of general interest. Articles should be practical and carefully prepared.

Secretaries of Medical Societies are respectfully requested to send us Reports for publication.

Each of our professional readers is personally invited to forward us Original Articles, Reports of Cases, Medical News, etc.

The Editors will not be responsible for statements made over the names of contributors.

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THE MEDICAL SCHOOLS OF THE UNITED STATES.

For many years the American medical schools have been a fruitful topic of medical addresses, essays and medical journal editorials. A State, county or local medical society could scarcely be said to have had a meeting, without introducing some resolutions or papers, or discussion on this subject. The medical editors, having exhausted all other topics, constantly revert to this theme. Some of them, who have been across the ocean and obtained some knowledge of European medical schools, seem to experience a peculiar delight in parading the defects of American schools. If they stopped here, their service would be invaluable, but not finding real defects to the extent desired, they invent others out of their shadowy cerebral tissues. Their delight is to vilify, to misrepresent everything that is distinctively American. Good or bad American medical schools are a natural growth in accordance with the needs of America. The true friend of medical education will labor that their development may ever follow the same law. There is good reason to believe that in the end this criticism, hypercriticism and vituperation of medical schools will result in their highest development. Meantime, those willing to labor in rearing the structure of medical education, will patiently and carefully persevere. Year by year they will modify their methods, as the changing circumstances and needs of the American medical profession seem to require. Meantime they will not do wisely to forget the experience of the past; how medical schools were born in America; how they grew through infancy, childhood and early manhood. This story is best told in brief words by Dr. Edward H. Clarke, late professor of materia medica in Harvard College (*American Journal Medical Science*, January, 1876.) He says:

"Our medical schools are an honorable contribution to the medical work of the century. The first systematic courses of lectures on medical subjects were delivered in Philadelphia more than a hundred years ago. During the colonial period and for some time after the establishment of the Republic, medical students derived their professional training from practitioners of greater or less eminence, with whom, to use a technical phrase, they entered their names as apprentices or students. By this arrangement they had the use of the library of their master, whose shelves, if not abundantly supplied, generally held a few books, and whose house usually contained in some closet or nook a few bones of the human frame, or perhaps an entire skeleton. These the student handled, examined, studied. His opportunities for clinical study consisted in witnessing and often assisting in the office practice of his master. There he pulled his first tooth, opened his first abscess, performed his first venesection, applied his first blister, administered his first emetic, and there first learned the various manipulations of minor surgery and medicine. After a time his clinical opportunities were enlarged, by visiting with his teacher the patients of the latter, and becoming acquainted, not in hospitals, but in private houses, with the protean phases of disease. His clinical lectures were his master's talk on the cases they had visited, as they rode from house to house. After three years spent in this sort of study and practice, the young man was supposed to have acquired enough medical knowledge to enable him to commence the practice of his profession. In proportion as a physician or surgeon became eminent, students who had the means to do so flocked to him, and he became the centre of a medical school. His clinical instructions, instead of being the talks that beguiled the way of a long ride, were changed into formal lectures, delivered in his study or in some private room. Those who proved to be the most popular teachers and who lived in the same city or neighborhood, associated themselves together for purposes of teaching. Thus were founded the medical schools.

"They did not give, and were not intended to give, a complete medical education, but only to supplement the instruction of private teachers. The courses of lectures were few in number and brief in extent. Students still continued to enter their names and study for the major part of the year with some medical man in their own neighborhood, and to attend lectures, as it was called, only three or four months of the year. Gradually a larger demand was made upon the schools; their lecture terms were lengthened; professorships were subdivided; new ones were added; hospitals were utilized for clinical instruction; the schools continued to enlarge their curricula of study, and at length added summer instruction to their winter work; museums were established; chemical laboratories were formed; microscopical departments created, and all the appliances were attached to schools that are necessary in the investigation of structure, life and disease. This process of growth has not yet stopped. It is still going vigorously on. * * * It is evident from this sketch of the medical schools of the United States that they are different in their organization, and to a considerable extent in their objects, from those in Europe. It is equally evident that the former are gradually approximating the latter, though it is not likely that their organization, methods of instruction and character, will ever be the same. The fact that the European schools are founded and controlled by the State, and are to a large extent responsible to it, and that American schools are independent institutions, self-supporting, and responsible only to public opinion, necessarily impresses a distinctive character upon the medical schools of the two continents. The atmosphere of each is different, each leads a different life, and each will produce a different result. Admitting such to be the case, it does not follow that the medical schools of the United States are necessarily of an inferior character, or that the physicians who graduate from them are imperfectly educated, for the schools (except Harvard) do not pretend to give a complete education, but only to supplement that which the student gets elsewhere. Indeed, it may be affirmed that those who, like the apothecary of England and the secundäs arzt of Germany, are charged with the medical care of the mass of the community in Europe, are not better equipped for the practical work of their profession than their average American contemporary. We do not mean to assert by this that the scientific training of our schools is equal to that of Vienna, Berlin or Paris, but we do assert that if the necessities and different conditions of Europe and America are impartially compared, we shall find that the American method of medical education yields as good a practical result to the nation as the European method of medical education does to Europe. And we further assert that the flexibility of the American method permits of change, growth and development, in correspondence with the demands of each succeeding age more easily and more rapidly than is possible with the conservative organization of Europe. Hence we are not ashamed to present our medical schools, with all their shortcomings and imperfections, as substantial contributions to the practical medicine of the century; and, moreover, we can justly point to graduates of these schools, some of whom have, and others of whom have not, been fortunate enough to add to their American a European education, as in every way the peers of European physicians or surgeons."

We are sure that every well informed lover of the medical profession will endorse as subtantially true this narrative of Dr. Clark, and thank him for telling the story so well. With so much gained during one century, and in spite of formidable obstacles, what may we not hope for the progress of medicine during the next hundred years.

ALUMNI ASSOCIATIONS—MEETINGS FOR 1876.

To THE importance of these associations, we have repeatedly directed attention. Medical schools, the medical profession and individual members are or should be a unit in promoting their development.

Last year two such associations were organized in Michigan—one connected with Detroit Medical College, on March 2d, 1875, and one connected with the Medical Department of Michigan University, on March 23d, 1875.

From circulars sent us we learn that the meetings for 1876 will take place the evenings before the respective commencements of the two schools. Due notice through the papers and circulars will be given of the exact hour and place of meeting.

Dr. E. A. Chapoton, of Detroit, is secretary of the Alumni Association of Detroit Medical College, and Dr. W. F. Breakey, of Ann Arbor, is secretary of the Alumni Association of the Medical Department of Michigan University. All who learn of these organizations should at once send their names and addresses to the secretary of the Alumni Association of the school from which they graduated. Further, each is requested to forward to the same person the names and addresses of alumni whom they may know; also the names of any they may know to have died, and any facts connected with their lives or deaths. All that cannot attend will send words of greeting by letter to those who do meet.

MEMORANDA.

Dr. Barnes says that a pure specialty cannot exist—a more monstrous thing cannot be conceived.

You will find in every day's practice that fatigue has a larger share in the promotion or permission of disease, than any other single causal condition you can name.—*Paget.*

Dr. Jewell says: "We think we do not mistake facts if we say that the average ignorance in the medical profession is largely concentrated on the nervous system, its anatomy and physiology."

Sir Jas. Paget says that the picture of spermatorrhœa, drawn by Lallemand, in its complete form is something unknown to the English, and it probably never existed, except in the phantasy of a wild imagination.

Prof. Farre (*The Clinic*), in a very suggestive paper, elaborates the proposition that, "In the hygienic treatment of chlorosis, not the nutrition, but the dwelling-place is the principal factor—not food, but air."

John Abernethy, when urged to give immediate attention to an English nobleman, answered: "Private patients, if they do not like me, can go elsewhere, but the poor devils in the hospital I am bound to take care of."

Dr. D. W. Yandell (Trans. Ky. State Med. Soc., 1875) presents facts showing that ovariotomy has been done in Louisville and Jefferson County, Kentucky, thirty-six times, resulting in nine recoveries and twenty-seven deaths.

Dr. Johnston, of the Chinese Hospital, at Shanghai, says that the attempt to reclaim the confirmed opium eater is hopeless. Three hundred and sixty such cases were treated at said hospital last year, but with no good results.

What are the qualities necessary to a medical reviewer? Dr. J. S. Jewell replies: "Intelligence, sympathy, candor, independence and tireless industry." He thinks that medical journals are sadly deficient in medical reviewing.

To prevent death from chloroform during the extraction of teeth, Dr. T. Lauder Brunton says that the patient must be put thoroughly under, and be laid in a horizontal position. Experiments upon animals and clinical observation support his views.

During the war, Dr. E. R. Peaslee was examining surgeon for recruits drafted from the lower portion of the city. He found that a large number of those who were presented had a pulse ranging from forty to fifty, and on further inquiry found that all of those so affected were cigar makers, with ages varying from twenty-five to thirty-five.

The *Doctor*, September, 1875, records the case of a stout married country woman, aged twenty-eight, who was killed by musical excitement. The occasion was a musical festival which lasted three days. On her return home the music constantly sounded in her ears day and night; night sweats and diarrhœa followed. Medical treatment availed naught, and at the end of six weeks she died.

A correspondent of the *St. Louis Medical Journal*, December, 1875, says that the medical journals of New York City compare unfavorably with those of sister cities. The reason given is that they are conducted in the interests of certain small societies or cliques of college men. Editors or other *attaches* have an opportunity of publishing for the third or fourth time second-hand papers.

Illustrating intellectual trance, Dr. Beard relates the case of a great lawyer who made an engagement to marry a lady to whom he was sincerely attached. The day of the marriage was set, and on the part of the lady all the arrangements were made; but he forgot all about it, and it did not occur to him for over a month, when he thought of his appointment, and hastened to the home of his expectant bride, to find her married to one of his friends.

A writer in the *Boston Medical Journal*, May 25th, 1875, groups as follows the various meanings given to the term cell during the past forty years:

1. A sac of protoplasm.
2. A sac of protoplasm containing a small sac, the nucleus.
3. The above containing a yet smaller sac, the nucleolus.
4. The above containing a yet smaller particle, the nucleolinus.
5. A sac, the protoplasmic contents of which have been replaced by fat or starch, or salts or pigment granules.
6. A sac which has lost its contents, and which has been compressed into a scale.
7. A mass of protoplasm having a nucleus, but no envelope.
8. A mass of protoplasm with neither envelope nor nucleus, nor trace of organization of any kind.
9. In strict language, a hollow sac would be a cell.

Book Notices.

TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF PENNSYLVANIA, at its twenty-sixth annual session; 1875. Volume x; part 2; pp. 380.

The president's address, by Dr. W. L. Atlee, is a readable and suggestive comparison of "Old Physic and Young Physic—some of the changes of the past half-century contrasted and compared, and their advantages estimated."

The address on medicine brings into prominence some of the topics on which medical interest has lately concentrated itself—thus indicating some of the directions in which clinical study promises the most marked and valuable progress during the next few years.

The report on forty-seven cataract extractions by Dr. P. D. Keyser, seems to have been honestly and skillfully made, thus adding to our statistical knowledge on this subject.

Dr. L. Turnbull recommends, in cases of closure of the eustachian tube from thickening of the mucous membrane, the application to its orifice of various strong caustics, by means of a new instrument called eustachian forceps. This is made of soft silver, and can be curved at pleasure to enter either by the mouth or nose. The medicine is placed on a sponge, and applied directly to the diseased part.

The report on hygiene by Dr. B. Lee forcibly states the well-known facts on this subject, oft repeated, and as oft neglected.

In the report on mental disorders, by Dr. J. Curwen, we find the following illustrations of the effects, on the nervous system of the child, of any disturbances of the mother during gestation:

A woman, mother of several healthy children, herself and husband having no hereditary taint of insanity, while pregnant suffered from a severe attack of Asiatic cholera, during which she showed symptoms of mental disorder. After her confinement, her health of body and mind returned. The child then born was from birth quite different from all the rest of the family. The girl's health was good, but her moral sense deficient. As a child, she was difficult to manage. On reaching the age of puberty, she displayed a want of control of her sexual propensities, consorting shamelessly with the male sex. She was the mother of an illegitimate child at the age of fifteen, and refused to say who was its father. Her character was totally bad—she hated her family, used foul language to her parents, threatened to commit suicide, kill her sister, etc.

The mother of the boy Pomeroy of Boston, while she was pregnant with him, was in the habit of frequenting slaughter-houses to witness the butchering of different animals, and seems to have taken special pleasure in witnessing such scenes, and also in drinking the blood as it flowed warm from the dying animal. Other papers and the reports from the various county medical societies of the State complete the volume—one of more than ordinary value.

TRANSACTIONS OF NEW HAMPSHIRE MEDICAL SOCIETY. (85th anniversary.) 1875. Paper; pages 172.

The addresses, orations, reports and papers are creditable to the society, both as to quantity and quality. Dr. Child, in a paper on sanitary measures in the rural districts, describes a New England cellar thus: "A nuisance and a common source of rheumatism, neuralgia, dysentery and other similar diseases, rendering all diseases more malignant." *Such* cellars are found all over the land, where cellars exist at all. How to purify and keep them pure is well described, as are many other allied sources of disease. Dr. Ephraim Cutter discusses the question, "Is flour our proper food?" He argues that it is not; that it is partially responsible for the prevalence of nervous diseases, the late erupting and early decay of teeth, the prevalence of weak and diseased eyes, baldness and premature gray hair, catarrh and consumption, and one of the causes for the numerical decline of the native population in New England. Dr. A. B. Crosby reports a case in which his father, the late Dr. Dici Crosby, removed the entire arm, scapula, and three-fourths of the clavicle. A perfect recovery took place.

TRANSACTIONS OF THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND. Twenty-seventh annual session. April, 1875. Paper; pp. 226.

After the usual business routine of the society, we find the excellent address of Dr. Toner—elsewhere noticed. Reports follow upon "Surgery," "Obstetrics and Gynæcology," "Materia Medica and Therapeutics," "Anatomy and Physiology." The first was hastily prepared, and is meagre. The second is full, and of interest to those who do not follow such matters in medical journals. The same is true of the last report. In regular order we find "Surgical Cases in Foreign Hospital Practice," by Dr. G. H. Boyland; "Contagium Particles of the Eruptive Fever—their Nature and mode of Action," by Dr. J. E. Atkinson. An interesting speculation, "Tinnitus Aurium," by Dr. Samuel Theobald; "Altitude and Climate in the Treatment of Pulmonary Phthisis," by Dr. W. Gleitsmann; "Importance of the Galvanic Current in Electro-therapeutics," by Dr. F. T. Miles; "Digitalis in Cardiac Diseases," by Dr. S. P. Chew; "Treatment of Paralyzed Muscles by Elastic Relaxation," by Dr J. Van Bibber. The volume indicates a healthy activity of the members of the society.

TRANSACTIONS OF MINNESOTA STATE MEDICAL SOCIETY. 1875. Paper; pages 130.

Opening with an address by the president, Dr. N. B. Hill, these transactions contain papers upon "Physiological Influence in Health and Disease," "Syphilis," "Ovariotomy," "Report of Committee on Surgery," "Report of Committee on Diseases of Nervous System," "Report of Committee on Necrology." Those reports on surgery and nervous diseases are in the form of reports of cases from practitioners in various parts of the State. Thus, to a certain extent, they constitute a State clinic, and indicate a very creditable work by the profession of Minnesota.

TRANSACTIONS OF MEDICAL ASSOCIATION OF THE STATE OF ALABAMA. 1875. Paper; pages 260.

We find the key note of this association stated on the first pages of its transactions: "To construct out of the scattered members of our profession a powerful organization, and through this organization to secure concert of action, and the prevalence of wise and prudent councils; this is the mission of our association." The association is a "medical legislature, having for its highest function the governmental direction of the medical profession of the State." Other functions are all subordinate to this. The president's address by Dr. John J. Dement is worthy of a careful reading. Dr. Ketchum's address on "Medical Ethics" is a novel feature at State society meetings, one to be imitated with profit in every State. Specially deserving of notice are articles on "Climate of the United States considered with reference to Consumption and Pneumonia," by Dr. W. D. Bizzell; "Malaria—its Nature and mode of Spreading," by Dr. B. H. Riggs; "History of the Small-pox Epidemic in the City of Mobile, 1874-75," by Dr. J. Cochran. This last is a very elaborate article, covering over one hundred pages. Dr. Peterson's report on "Recent Progress in Gynæcology," and Dr. Gaines's article on "Tuberculosis and Scrofulosis" are excellent compilations of their respective subjects. In few States does the profession issue a more creditable report of its annual meetings.

TRANSACTIONS OF THE AMERICAN OTOLOGICAL SOCIETY. Eighth Annual Meeting. 1875. Vol. 2; part 1. Paper; pages 97. Boston: James Campbell.

The report by Drs. Blake and Mathewson is very complete and well arranged. Dr. Albert H. Buck reports fifteen cases of aural disease, illustrating the method of using medicated eustachian bougies in treating affections of the middle ear, and showing the results of such treatment.

Dr. C. J. Blake contributes a paper on "Intra-Tympanic pressure during Phonation,"

Dr. George Strawbridge reports some cases of peculiar malformation of external ear.

Dr. O. D. Pomeroy reports a case of multiple abscess of the auricle, resulting in partial destruction of the cartilage developed from a middle and external otitis, and somewhat resembling an athæmatoma.

Dr Rosa emphasizes the necessity of an early treatment of all ear affections. "Our mission is now at least to teach the profession and public that *acute* cases of aural disease are peculiarly susceptible to treatment, and that our hope for the prevention of chronic diseases lies in the early treatment of the very earliest stages of affections of the ear." Dr. Rosa also reports an instance in which pleuro-pneumonia resulted from suppuration of the middle ear.

TRANSACTIONS OF AMERICAN MEDICAL ASSOCIATION. Vol. xxvi. Cloth; pages 478.

Our notice of this meeting, published the middle of last year, gave the essential features of the session. In one form or another, everything there read or stated, which had any theoretical or practical value, has long since been scattered over the land, through dozens of journals. Perhaps it pays to have all bound in one volume for convenient reference.

DETROIT

REVIEW OF MEDICINE

AND PHARMACY.

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Original Communications.

WHAT THE MEDICAL PROFESSION ASK OF THE PEOPLE.

Address at the Commencement of the Detroit Medical College, Feb. 29, 1876. By the Rev. Arthur T. Pierson, D. D., Pastor of Fort Street Presbyterian Church, Detroit, Mich.

UPON an occasion similar to this, some two years since, it was aptly remarked, that the fact that a clergyman was then invited to make the annual address, is a practical refutation of the notion that, between the two professions, there is antipathy or antagonism. May we not add, to this negative statement, a positive one, and affirm that it is both a proclamation and proof of affinity and affiliation?

Between the medical and the clerical professions, the bonds of brotherhood are, in fact, peculiarly close. Not only do both, as among the learned professions, represent the higher planes of educational culture; but the duties and responsibilities characteristic of these two callings, are, in their more marked features, significantly similar.

Both stand as sentinels at the gates of life and of death. Ever since sin came into the world, and death by sin, men have felt the need of physicians for the body, and physicians for the soul. And so we are, both, students of the science and the art of healing: one applies the balm of Gilead; the other, the balm of the apothecary.

The intimate connection of the two vocations results partly from the close link between physical and spiritual disease. Abnormal conditions of body commonly imply, if they do not induce, unhealthy states of mental and moral constitution. Beneath the old maxim of Horace, there lies a true philosophy: "*Mens sana in corpore sano.*" So contiguous are the territories of physical and spiritual disease, that the boundary lines of limitation, which divide and distinguish them, have never yet been exactly drawn. All the scientific research of six milleniums has not told us where bodily ailments end and spiritual ailments begin. And so a clergyman feels compelled sometimes to send to the physician, those who seek him for spiritual help and healing; and the physician sometimes refers his patient to a spiritual guide, as preeminently in need of religious counsel and comfort.

A distinguished clergyman of New Jersey, who was suffering greatly from hypochondriasis, was startled to hear a simple-minded but sensible member, from a rural district of his parish, offer in a prayer-meeting this petition: "O, Lord, bless our pastor and help him to digest his food." And he is wont to say that, at the time, no more proper prayer could have been made for him; for just then, the prime condition of all effective service was a good digestion, a sound stomach.

In the address already referred to, a brother clergyman, with characteristically apt and well chosen words, spoke of "the demand which the laity make upon the medical profession." Allow me to invert the question, and ask what the medical profession may justly ask of us, the common people?

I. I answer, first, a recognition of *the necessity and dignity of their calling.*

Ignorance has been said to be "the mother of devotion," which is true only when devotion is used as the synonym of superstition. Words can not express the debt we owe to the medical profession for what it has done, by the *diffusion of sound medical science,* to provide an antidote for both ignorance and its offspring, superstition.

Happily, it is too late in human history for us to need seriously to refute the absurd notion born of ignorance, that physicians are not necessary because every man may and should be his own doctor. The more we know of the human constitution, the more are we amazed at its delicacy and intricacy; and the more we know of medical science, the more do we feel that it is the most delicate and difficult of all the sciences. Moreover, if you and I possess any measure of fitness for the intelligent promotion and preservation of life and health, whence does it come, but from the very researches of the medical profession? The objection we are considering betrays, therefore, not only ignorance, but stupidity, for the objector owes to the physicians, whom he decries, his capacity, however small, for being his own doctor.

As to superstition, all knowledge is its foe. Cuvier could not be frightened when a ghostly devil, with the traditional horns and hoofs, approached him, growling with sepulchral voice: "I'll eat you!" Calmly surveying the figure, the great comparative anatomist said to himself: "Humph! horns and hoofs! not carnivorous but graminiverous; he won't eat me!" Think what medical science has done to undermine the superstition which, in the realm of disease, has been almost as baleful and baneful as disease itself. The time was when sickness was thought to be an evil enchantment, and its cure implied disenchantment, and so, instead of the skillful doctor with his remedies, the juggler was called in with his magical arts and incantations. What educated physicians have done to banish popular ignorance and superstition, alone, lays society under an immeasurable obligation.

The medical profession is made necessary by the very existence of *abnormal conditions of body and mind.* Whatever may be said of total depravity, in the moral sphere, no discerning man will be disposed to deny that there is working in our humanity, at least, a physical depravity. Explain it as you will, there is a universal proneness to morbid conditions: we scarce ever meet with a specimen of perfect health.

Doubtless this is partly due to the personal *infraction of natural* *laws.* Self-indulgence is habitually excessive. Take, for example, excess in eating. Gluttony is one of the commonest of sins. There are few of us who could not illustrate at least one passage of Holy Scripture, and ask with Solomon: "For who can eat or who else can hasten hereunto more than I?" (Eccl., ii, 25.) Sidney Smith availed himself of Horace's privilege of speaking the truth in a jest, when he announced as the result of a careful mathematical calculation, that, between his seventh and seventieth years, he had eaten just forty-four and a half wagon-loads more than was good for him.

Morbid conditions are partly due, also, to *inherited tendencies.* By the operation of organic laws, certain aptitudes,. physical, mental and even moral, are transmitted from parent to child, sometimes to remote generations. How vast the importance of this subject to the welfare and future destiny of society, and how imperfect, hitherto, the exploration of this broad field for scientific investigation! And who shall undertake to carry this momentous work to completion if it be not the masters of medical science!

An order of physicians is demanded, if by no other consideration, upon the principle of *a division of labor.* The more civilization advances the more do we discover the drift toward a specialty. Attention is given to more and more minute branches of knowledge, as trees, in growing, ramify, running from larger to smaller growths till they develop the tiniest twig.

There is a story of a German linguist, who, on his death-bed, confessed to his son his deep regret over the great blunder of his life: "I have," said he, "mainly limited my studies to nouns of the third declension; I should have confined myself to the ablative case." Behind the humor of the anecdote, there hides a truth; for, in the progress of civilization, men find such illimitable fields of knowledge open before them, that they feel compelled to narrow down the range of their scientific pursuit, expending life sometimes in the examination of a single species, or even variety, of plant or animal.

II. Again, the medical profession may justly ask of the people a recognition of the *necessity of a thorough education* on the part of those who would practice the healing art.

The treatment of disease is too vital to be left to the mercy of superficial knowledge. Those who claim general intelligence commonly exemplify particular ignorance, and, as Dr. Parr said of his all-knowing student, "could make a big book if they put in it all they don't know."

We are all ready to concede the existence of quackery, and the misery inflicted by it on society; and there is no more striking proof of the bold empiricism of the day than for ignorant and uneducated men to claim a sort of inborn aptitude for the treatment of disease. I heard of a lawyer, down east, who was nicknamed "Necessity," because "necessity knows no law;" and it is not incredible that there may be so-called "doctors" who know no medicine. A fair specimen might be found in the quack who said that neuralgia was so-called because it was a "new ralgy," or "new form of nerve disorder;" or in the self-constituted "professor," down in Pennsylvania, who, in counselling as to treatment in certain bowel-diseases, said: "Take such drugs as you know to be good for the bowels, shake them together in a bottle, and pray the Lord that some of 'em may hit the case." With regard to all such pretenders, it might not be inappropriate to add a petition to the litany, devoutly asking that from all who claim intuitive knowledge of medicine, we may be graciously delivered!

Where lies the responsibility for empiricism? Certainly not with the medical profession. That such a calling should attract pretenders is nothing strange. Sound coin always has its counterfeit. Nothing more diligently seeks notoriety, than ignorance and vulgarity. But the medical profession has long held up the highest standard of qualification for admission to its ranks. Responsibility for empirics must be lodged with the people who encourage them; and, to avoid such responsibility, we must help the profession to maintain its high standard.

How wide *the range and scope of the studies* necessary to skill in this great calling. With herculean labor, he who would treat disease must, first of all, master the science of the human body, its anatomy, physiology, hygiene—its laws of respiration, circulation, digestion; the wonderful duality of the nervous system, with its network of nerves of motion and sensation.

How can he grasp the science of pathology without the comprehension of each of its four grand divisions: nosology, etiology, symptomatology and therapeutics? And how can he understand therapeutics alone—that part of medicine which respects the discovery and application of remedies for diseases—without investigating toxicology and chemistry; the chemical composition of the human body, and its food, of plants and minerals, making necessary the study of botany, mineralogy and cognate sciences?

Beside all this book-knowledge, what an immense amount of clinical practice, actual examination of the animal organization with the lancet and scalpel, and personal experience in the treatment of patients, are needful to the practical education of the accomplished physician and surgeon! It used to be humorously said that in ophthalmic surgery, one must expect to spoil a peck of eyes, in acquiring the skill requisite for a successful operation in removal of cataract—which is only a quaint way of saying that no amount of mere theoretical knowledge will suffice.

This leads me to add that our beautiful and progressive City of the Straits ought to signalize this centennial year by the erection of a building for our medical college. There is now no longer any room for doubt of the necessity and expediency of establishing such institutions in the midst of populous cities, and in the immediate neighborhood of hospitals, that the fullest facilities may be furnished for both a theoretical and practical education, to students of the healing art. And in my judgment there is scarce a demand more imperative in our city to-day, than for a medical college building, centrally located, with ample arrangements for lecture rooms, laboratories, dispensaries, and every appurtenance of the most modern institutions of the sort; in a word, an edifice as complete and tasteful as the medical faculty is confessedly accomplished and skillful!

I have sketched in outline the course of theoretical and practical study which is the preparation required for the modern physician. There may be some, however, who fail to perceive the necessity for such a long and laborious training for the medical profession.

If anything need be said further in its vindication, let it be borne in mind that this high standard is just what helps to purge the ranks of the profession. It keeps out, or drives out, pretenders. Education is a severe sifting process. It tests intellectual *faculty*. Cotton Mather had two heaps: "the unintelligibles" and "the incurables;" into one or the other of these heaps a thorough course of discipline is tolerably sure to rake those who are really unfit for such a high calling. It discovers radical incapacity or incompetency; it shakes at the four corners the "napkin" in which the "talent" is supposed to lie hidden, and sometimes finds nothing in it.

It tests also intellectual *application*. Euclid told Ptolmæus Lagus, that there was no royal road to geometry; as Aristotle reminded Alexander that there was no short path to learning. The student of medicine must have patience, before he has patients; he finds that an education is not acquired in a day, and the hill of science is not ascended by a railway. To attempt to hurry into medical practice simply betrays the fool. Such an one is like the English woman who asked Wellington "to give her ten minutes, some afternoon, and tell her all about Waterloo;" or the French lady of rank who said to a great philosopher, "It will be five minutes before dinner; do rehearse to me the history of the world; I'm dying to hear it!"

And, again, a severe course of training tests *common sense*. Dr. Candlish is said to have reported, as chairman of a committee on candidates for the ministry, "Brethren, we find this candidate lacks three things: first, good health; second, grace; and third, common sense. The Lord may gie' him health, and the Lord may gie' him grace, but neither the Lord nor any one else will gie' him common sense; and we recommend that he be not approved." When the sagacious professors in our medical chairs discover in a student this radical lack of common sense, practical judgment, so essential to a physician, they manage to discourage his pursuit of the profession. And so we have to thank the very discipline of which popular impatience is prone to complain, for ridding us of many who aspire to be known as "doctors," to whom few would owe the Irishman's debt of gratitude, who "had his doctor to thank that he had the fever twice and didn't die the first time!"

The training which thus sifts out the chaff, by the same process leaves the pure grain: those who do get into the regular profession commonly prove able and competent. We find them men of large resources. It is generally a sure sign of quackery, when one is excessively jealous of professional secrets; the man of affluent culture is not conscious of intellectual poverty nor fearful of professional bankruptcy; and is not extremely careful lest a patient discover his remedies, or even his principle of treatment.

The thoroughly educated man is a man who appreciates the need of constantly increasing his fund of knowledge.

The high-minded physician himself often declines to practice, after having for a term of years withdrawn from the activities of his calling. Like the colored helmsman, who, with his hand on the rudder, fell asleep, and awoke bewildered to find that the vessel, veering about with the wind, had left the north star behind, and called lustily to the captain: "Shew dis chile another star! I sailed by dat long ago;"—the physician, retiring for a period from practice, hesitates to resume his place at the sick bed, until new study has qualified him to stand again in the van with those who, meanwhile, have been steadily pushing forward. He would as soon consult an old almanac, as to trust the professional knowledge which is not constantly gathering new facts and materials.

III. The common law of equity demands, in behalf of the medical profession, that we, of the people, recognize the *costliness of their culture.*

In the popular estimate of the compensation for the services of a physician, due consideration is seldom given to the expensive training which is the golden gateway to this high vocation of healing the sick. The ignorant, inconsiderate patient marvels that the examination which consumes but a few moments, the counsel which costs but a few words, the prescription which takes but a few strokes of the pencil, are followed by such a fee.

A Venetian nobleman found fault with the price which Canova affixed to a bust: "You charge me fifty sequins for the work which took you ten days." The sculptor calmly replied, "It took me thirty years to learn to make that bust in ten days." So has it taken years of discipline and experience to learn with such facility and felicity to diagnose disease and prescribe its remedy. Ample indeed must be the fee which yields a generous interest upon all the capital of time and brains, money and energy, expended and invested in preparation for professional practice and success!

IV. The medical profession may justly ask of the people a generous recognition of *the unselfishness of their service to society.*

A physician is pre-eminently the servant of the public. More, perhaps, than any other class of men, these are subject to *constant calls.* The summons of disease and death are imperious and imperative, invading all hours and allowing no exception or exemption. The labors of the day are often incessant, but even "the night is filled with music"—not in the sense of Longfellow's poem, but the music of ringing door-bells and crying babies, "and the cares which infest the day," do *not* "fold their tents like the Arabs and as silently steal away." We who rest in a warm, soft bed, and enjoy the peace of unbroken sleep, should not forget that the night of the doctor is never safe from interruption; the calls of the diseased and dying are often loudest at the midnight hour, and make life doubly a burden.

Observe also that, as one condition of his vocation, the physician accepts the necessary *exposure to the infection and contagion of disease.* Through the very midst of the pestilence that walketh in darkness and the destruction that wasteth at noon-day, he moves like a white-winged angel of mercy; thoughtless of personal risk, while studying to bring help and health to the sick and the suffering, and to pluck the awful arrows of Azrael from out his quiver, and even from his shining bow. No marvel, if the patient kisses the shadow of the physician that has walked by his side through the death-shade, as the soldier at the Crimea kissed the shadow of Florence Nightingale, as she passed by his bedside.

There may, I trust, be no unfitness in my adding a word to the gentlemen who, to-night, go forth with the sanction of this college to practice the healing art. With a fraternal interest in your success, let me express the hope that you may set before you the two grand laws or principles of all real progressive usefulness in this grand calling.

First, that *industry* is the sole basis of all true intellectual acquisition, and professional qualification, in this or any other calling Hogarth and others, like Joshua Reynolds and Alexander Hamilton, themselves accredited with genius, have been wont to assert that even genius is nothing but labor and diligence. To be graduated from this college is only to enter upon a course of study which only existence can end. Upon this subject all the wisdom of the centuries is compressed in that one sentence, with which, in 1874, the president of the Michigan State Medical Society, who is also the president of this Medical Faculty, closed his address: "Wealth cannot insure success; genius cannot command it; it is to be *attained*, and comes not as a natural gift. Those who have in any sense become eminent know full well the patient, and sometimes painful, toil through which success is attained, and those who triumph are only those who work."

Secondly, let me remind you that the broad *moral* basis of all true service to humanity is *integrity*.

In no department of life, can any amount of brains or any grade of culture compensate for a lack of high and heroic moral character. Pericles and Cæsar, Marlborough and Bacon, afford illustrations of the melancholy magnificence of splendid intellect overshadowed by moral defect and deformity. Every man must build his character like Ehrenbreitstein, upon the "broad stone of honor."

Who can measure the opportunities of a physician both for good and evil, and the imperative necessity that the practical morals of the profession shall be as elevated as its noble ethical standards. No one, not excepting the christian pastor, comes more unchallenged into the very secresies of our household life. From the pangs of birth to the throes of death, he is guardian of health and life, welcomed to the inmost intimacies of our personal and family history. If his touch be pollution, no skill in the healing art can atone for moral damage inflicted; but if, to the mastery of his profession, he adds the nameless charm of a magnanimous manhood, his presence in the family, like the breaking of the alabaster box of ointment, fills all the house with its sweet odor.

To *be*, rather than to *seem*; to exemplify genuineness of character rather than inflate the bubble of an ephemeral reputation; to prove the true, trustworthy friend of your patients; to be able to comfort them with your presence, even when your medical remedies can no longer reach to the extremity of disease; and, in the last hour, to act as an angel, guiding the dying to the sure rest of suffering souls—ah! that is to rear, in the midst of the shifting and tumultuous tides of our human life, a moral Eddystone, worthy to bear the inscription graven, by Smeaton, upon the rocky cone which has made him immortal: "*To give light and to save life.*"

THE RELATIONS OF THE PHYSICIAN TO SOCIAL LIFE.

An Address delivered at the Annual Commencement of Detroit Medical College, February 29, 1876, by Prof. R. C. Kedzie, M. D.

No PERIOD of life is so full of eager expectancy as when the young graduate goes forth from the sheltering roof of his college training to enter upon the struggles of professional life. The hopes of success and the possibilities of failure alike stir the pulse from its equable beat, and the eye glances down the vista of coming years with eager desire to pierce their concealing shadows. The young graduate as he goes forth says to himself, " the world is all before me." Aye, but it is a world to be won—not accepted! You will do well, therefore, to count up what allies you have in this struggle of one against the many, to consider well both what will conduce to your success and what will tend to your defeat.

The tyro in medical practice is apt to consider his professional training as the only condition necessary for success; and without the severest professional training defeat ought to cover him every hour. The three grand elements of success in any honorable calling are BRAINS, ENERGY, CHARACTER. But there are also collateral elements, without which success is problematical. One of these I present to you under the somewhat vague subject—the physician's relations to social life.

The old idea that by entering a profession a man stepped aside from the stream of common life, has faded with the ignorance and misconception upon which it was founded. It was this idea which sent the priest to the cloister, wrapped the lawyer in a snuffy winding sheet of poor Latin, and made the doctor a mystic. He should be a man before he is a professional, and all the more a man for his profession.

The demands which society will make upon you, in addition to the well conceded demand for professional skill, are many in number and vast in significance. These demands are just in their nature.

1. Because of the magnitude of the interests committed to your keeping. Think what interests are placed in your hands. Ease, comfort, health, life—all are placed in your keeping. When so much is at stake, do you wonder that men require pledges of you that you will guard well your trust? No other profession makes such demands upon their clients.

2. Because of the intimacy and confidence which are necessary conditions for the exercise of your skill. Sickness and death enter all doors: no locks or bars may shut out their dread presence.

" There is no flock however watched and tended,
  But one dead lamb is there!
There is no fireside, howsoe'er defended,
  But has one vacant chair!
The air is full of farewells to the dying,
  And mournings for the dead;
The heart of Rachel, for her children crying,
  Will not be comforted."

First or last, the physican has the "Open, Sesame," of every home.

3. From the nature of the confidence which must be placed in a trusted physician—and no sane man will employ any other. Some cynic has said that " there is a skeleton in the closet in every house." It may be the rattling bones of some dead hope—it may be some great sorrow—blighting dishonor, or nameless shame. Whatever it is, the physician's eye rests upon it at last. A moral anatomist of keenest blade has said, *"A man burdened with a secret should especially avoid the intimacy of his physician. If the latter possess native sagacity, and a nameless something

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*Hawthorne's Scarlet Letter, pp. 142-3.

more—let us call it intuition; if he show no intrusive egotism, nor disagreeably prominent characteristics of his own; if he have the power, which must be born with him, to bring his mind into such an affinity with his patients, that this last shall unawares have spoken what he imagines himself only to have thought; if such revelations be received without tumult, and acknowledged not so often by an uttered sympathy as by silence, an inarticulate breath, and here and there a word, to indicate that all is understood; if to these qualifications of a confident be joined the advantages afforded by his recognized character as a physician—then, at some inevitable moment, will the soul of the sufferer be dissolved, and flow forth in a dark but transparent stream, bringing all its mysteries into the daylight."

"Thus far and no farther," is the decree of society to all classes save the physician. All other professions have their limitations, because men are ever on their guard. Even social intercourse between intimate friends has its disguisements and concealments. Human thought and emotion have more than a garment of fig leaves to conceal their form. But in the inexorable presence of death, or of disease—his shadow, how quietly do all marks and disguises fall off, and the real character stand revealed in utter nakedness like a human soul in the presence of its final judge!

A knowledge of real character is an element of vast power in the hands of a strong man. Your very position in the family and in society is a vantage ground of great significance. So far as the life is concerned, no profession holds such tremendous possibilities in his hands as the physician. When I consider the light and trifling considerations which so often determine the choice of the family physician—when I see quacks in profession, cheats in character and charlatans in morals, chosen to this high position, I am filled with unutterable amazement! No man is fit to be trusted with such responsibilities, not only as regards health and life, but in regard to all that gives life worth and value, who is not, first of all, pure in life, and noble and worthy in all his thoughts and feelings. A noble manhood should be the groundwork for a noble profession. All acquirements of professional skill are of small worth when divorced from character. Your entrance into any family as their physician has vast significance for weal or for woe. "I beseech you that ye walk worthily of the high vocation with which ye are called!"

Society will make, and justly make, three demands upon you:

1.—*Courage.* You will be called to most trying and perplexing exigencies, where you will need full command of all your powers. The very life of your patient will depend upon your coolness and presence of mind. Let no sudden fear lead you to play the coward's part. Imitate the colonel, who, when his men were under severe fire, and had become demoralized thereby, put them through the manual of arms, and thus held them to their work. ***Feel your own pulse,*** if thus only you can rally your disordered thoughts! Preserve at such times, not an icy coldness, but the lofty courage of a soldier who disdains to desert his post.

I have known physicians who were so easily discouraged about their patients, when any unfavorable symptoms appeared, and so readily announced an unfavorable prognosis, that they greatly damaged their professional reputation by such moral cowardice. In one neighborhood it became a common remark, "When Dr. L. says a patient is going to die, it's a sure sign that he will get well." But young physicians usually have so much confidence in their own skill that possibly this warning is needless.

2.—*Truthfulness.* I know the strong temptation which the physician feels to give the brightest look to his case; and this is proper and right so long as truth is maintained. I know physicians often justify falsehood "because the truth will uselessly alarm the patient and friends." I know that great tact and wisdom are essential in announcing any unfavorable prognosis, and it may not always be wise and expedient to inform the patient of his real case. But if unfavorable results are reasonably certain, the patient or his friends have a right to know the facts, and to have timely warning. To conceal the facts from all parties, under such circumstances, is a violation of an implied professional contract on your part, and one which will be keenly resented by the survivors.

I knew a Doctor Blank who began his practice with the determination that what he said should be the exact truth. He often paid the penalty for such frankness by his patients passing into the hands of other doctors, who promised speedy and certain recovery, but the subsequent history of such patients justified Dr. Blank's truthfulness and accuracy, and it soon became known in the community that his word could always be relied on. This element of truthfulness became a tower of strength in his practice. When a patient, anxious about his condition, and whose very anxiety was a source of danger, questioned the doctor, and was assured that he would recover, he exclaimed: "O! you doctors are afraid to tell sick folks the truth!" "Did you ever know me to tell them a lie?" "No, you always tell the truth, and I will trust you."

The following conversation once occurred in his neighborhood: "How is Mr. J.?" "Dead!" "Dead? I had not heard that. When did he die?" "I don't know when he died; but Doctor Blank said yesterday that he could not live, and when Dr. Blank says I've got to die, I'm going to die and ask no questions."

Avoid the cheap and transparent falsehood of giving some formidable name to common diseases. With some doctors remittent fever is always typhoid, a sore throat is diphtheria, summer complaint is cholera, and their patients are usually blest with the most terrible diseases known in medical practice, and they are also favored with a Doctor who has wonderful success in treating such terrible maladies! Such counterfeit reputation may pass current with the ignorant, for a time, and for a time only, but intelligent men will brand such a doctor as a *quack*, whatever the source of his diploma.

3.—*Sympathy.* Some physicians seem to feel that to attain their ideal of a perfect physician they must blot out all feeling of sympathy with their patients, as a weakness to be subdued. Where sympathy clouds the judgment and unnerves the hand, it must be sternly repressed; but no physician becomes great by becoming unfeeling and cruel. A man becomes great by cultivating the sympathies and aspirations of a grand and noble nature.

Gentlemen, you have chosen a path full of responsibility, of anxiety, of sorrow. Not always will the welcome signs of convalescence greet your eyes, but sometimes you will be compelled to stand by, helpless and self-reproachful, to witness the heart-break of abandoned hope. To see loved friends sinking down into death, and your hand powerless to save—this is the bitter cup you must sometimes drink, and none but the physician can know its full bitterness. But even in this dark hour you may do much by your sympathy. When the body sinks clutchingly down into the wild whirlpool of death, how naturally the hand falls upon the supporting arm of the physician! In this tumultuous crisis of existence, with firm hand but gentle voice, and with central poise of character, soothe and steady the soul that is breaking from the shores of time.

Do I draw a picture that jars the day-dream of your professional life? Are your visions of light prescriptions and heavy fees? Do you look for a life free from care and full of pleasure? Then have you fearfully mistaken your road! The vast kingdom of suffering lies wide spread before you. Pain hath his kingdom, more pronounced than the airy realms of joy. Just as ice hath a more solid touch than sunshine. Sad—Oh! inexpressibly sad—would be your professional life if God had not placed in your hands the copious means of assuaging pain. But there are ministrations of relief that enter into no prescriptions, and are compounded by no apothecary—the strength and consolation that radiate from a noble character, and that cluster around a hopeful, loving heart. Back of all heroic remedies must be a tender sympathy; behind the surgeon's cruel knife must throb the heart of a mother's tenderness.

The best words which you will receive for such a life will never appear on your ledger, and will be found in no bank of deposit on earth. The grateful look—the wan smile that creeps across the face of your convalescent patient, and that gathers into a tear of thankfulness, is a reward which angels might covet.

Gentlemen, God speed you on your errand of mercy!

Agricult. College, Feb'y, 1876.

NOTES UPON A CLINICAL LECTURE.

By Prof. G. P. Andrews, M. D. Reported by C. Hibbard, M. D.

Gentlemen—Through the kindness of Prof. Connor and the members of his post-mortem class, I am enabled to exhibit to you some very interesting pathological specimens, taken from a patient who died at the Marine Hospital, after a sickness of some eight months.

We have no definite account of the previous history of the patient. He was a sailor, and we only know that for some time previous to his admittance to the hospital he was obliged to rest from work very frequently.

The first feature that strikes us in the appearance of this specimen, is its unusually small size; in fact, the whole bulk hardly equals the dimensions of a single normal lung. Still the patient was able, with even this small area of vesicular surface, to be about his work for several months. Patients have lived for years with hardly more than one-third of their lungs available. These lungs were found crowded up toward their roots, and the space between them and the diaphragm filled with fluid. During the acute stage of pleurisy, from which the patient has at some time suffered, as we know by the thickened pleura, the amount of fluid effused into the thoracic cavity is sometimes enormous; the pressure exerted by it obliterates the intercostal spaces, and when the chest walls are punctured it will jet out to the distance of several feet. If recovery takes place, the fluid is absorbed and the lungs return to their natural condition; if it remains long, however, permanent changes take place in the lungs; and if it is absorbed, great deformity of the chest follows, owing to atmospheric pressure from without. In some cases the thorax appears as if it has been crushed in by a heavy blow. Two other elements have assisted here in the diminution of lungs, which we will speak of further on.

These lungs are covered by a thick, buff-colored, glistening membrane, so tough that as I pass the tenaculum through it, the small band on the curve of the hook is strong enough to sustain the weight of the two lungs. This is in marked contrast to the false membrane covering the lungs of a phthisical patient that were exhibited to the class during the preliminary term, which was thicker, very soft and friable, and showed well the early condition of pseudo-membrane. In this stage the exudation is succulent, filled with serous fluid, which may be pressed from it as from a sponge. This is, in time, absorbed, and contraction takes place within it while the lower part of the cavity still contains much fluid. By the absorption the membrane become thinner and tougher, contracting strongly at the same time, thus furnishing the second element in the decrease of the lungs themselves. This shrinkage of the membrane is like the ordinary condensation of cicatricial substance.

The false membrane covers closely the whole of the pleural surfaces and binds the lobes together. It connected the costal and pleural surfaces so strongly at the apex that it was necessary to cut through it to remove the lungs.

As the knife passes through the mass the sensation imparted to the fingers is like that of slicing cartilage; and from a distance the appearance of the parenchyma more resembles flesh than anything I can compare it with—for it is congested with blood, and hence is red in color.

The whole substance is condensed and altered by inflammatory exudation. We find in the apex of the right lung an old cavity, whose walls were covered with a thin layer of pus, that has been washed off the better to show their character; they are comparatively smooth, roughened but slightly by the projecting inwards of small tubercles that stud the entire mass of the organ. They are lined by a tough, shining membrane, which secreting pus, as mentioned, has been called a pyogenic membrane. This cavity, had recovery taken place, would have grown smaller and smaller by the approximation of opposite sides, until all that was left to tell the story would have been a stellate collection of connective tissue—and we can have no doubt that this does often take place, the amount of lung thus lost unfitting the individual for extraordinary exertion, in a greater or less extent. The formation of cavities is the third factor in the diminution of aërating surface.

In the specimen mentioned as having been shown during the preliminary term, there was found a more recent cavity, whose internal face was rough, jagged; and passing from side to side through it were the larger bronchial tubes unbroken. By a hardening of the surface and shrinkage somewhat similar to that which we have described as taking place on the outside of the lung, the pyogenic membrane is formed. A diagnosis of the cavity would have been more difficult in that case than in the one before us. Deeper down we find another cavity similar to the first. The lining membrane of both might be likened to the mucous coat of the stomach.

Throughout the whole substance of the lungs we see small, gray, translucent spots, not much larger than a pin's head, which follow the course of the blood vessels. These are tubercles, and are to be carefully distinguished from what was formerly considered as tubercle, but which we now know to be masses of cheesy degeneration, which may be as large as a pea, and are the results of the degeneration of the products of inflammation. The caseous masses and tubercles may be mixed together. The entire history of tubercle is still incomplete, and its pathology is illy understood.

CASE OF DISLOCATION OF THE SIXTH CERVICAL VERTEBRA.

Service by Dr. H. O. Walker, St. Luke's Hospital. Reported by Charles C, Hibbard, M. D.

CHARLES GROTH, a native of Germany, and resident of Springwells, while wrestling in a saloon on the evening of December 24th, was thrown over the shoulders of his opponent and struck on his neck and shoulders. The two men stood back to back, with their elbows interlocked, each striving to throw the other over his head with sufficient force to cause him to turn a somersault and land on his feet. The patient's opponent was not strong enough to accomplish this, and Groth being lifted from his feet, slid over the other man's shoulders, with the result mentioned.

The patient was 27 years of age, 5 feet 10 inches in height, weighed nearly 200 pounds, and was in every way perfectly healthy at the time of the accident, and was not intoxicated. He was taken to his boarding-house, where his wants were attended to. The next morning an irregular physician was called in and prescribed a local application. The patient remained under his charge for three days, nothing further being done for him. He was brought to St. Luke's Hospital at 1 P. M. December 27th, when he presented symptoms as follows: Pulse, full and strong, 72; respirations, 36, short, the diaphragm alone working; temperature, in mouth, 98⅓°; in axilla, 99°; in arm, 100°; skin dry; pupils, contracted; tongue, large and flabby. The only objective symptoms at the point of injury were slight swelling and a depression just under the spinous process of the sixth cervical vertebra. The patient could move the arms a little, but could flex neither fingers nor elbows; motion was better in left arm than right. He was entirely paralyzed in all parts below, and anæsthesia existed below the second rib. The abdomen was greatly distended, and three quarts of urine were drawn from his bladder immediately after his admittance—no catheter having been used before. The patient was very restless, complained of severe pain in back part of head on inspiration; talked very little, but gave intelligent answers to all questions. Patient was very thirsty, but anorexia was complete. Immediately after the injury the man was delirious, and priapism existed. He could not then move his arms. When the soles of his feet were pricked reflex movements of the toes took place, the patient being unconscious that his feet were touched. On the morning of the 28th he could not move the arms at all, and never regained motion. At the patient's request, two small cantharidal blisters were applied over the injured spot. It was necessary to use the catheter frequently during the time the patient lived. His bowels were emptied by means of an injection, which was drawn off through a rectal catheter. Flatus was removed by the same means. A bed-sore appeared over the sacrum the second day after the patient was admitted. He was supported by beef tea, egg-nog, and milk, which were given him from a feeding-bottle. He was delirious occasionally. He became comatose at 11 P. M. December 30th, and died at 6 A. M. December 31st. His temperature at the time of death was 108½°. For several hours before death hiccough was almost uncontrollable, being checked in part by large doses of chloral hydrate. The right side of the diaphragm alone carried on respiration for some time before death.

An examination was made eight hours after death. The sixth cervical vertebra was dislocated and forced over toward the left, the tip of the spinous process broken off, and also a portion of the upper and posterior part of the body of the seventh. That extravasation of blood had occurred was shown by a clot found between the vertebra. The medulla spinalis was much softened, almost flowing through a cut made in the membrane. The brain was congested. The blood was very fluid, and had oozed through the places where the blisters had been applied. The abdomen was greatly distended, and had turned green, an evidence of very speedy decomposition. As time was limited no examination was made of the thoracic or abdominal cavities.

HISTORY OF CASE.

DATE.	HOUR.	TEMPERATURE.	PULSE.	RESPIRATION.	REMARKS.
Dec. 31.	8 A. M.	101½	66	22	Priapism during night.
	2 P. M.	102	66	24	Patient getting weak.
	8 P. M.	103	70	28	Patient getting weak.
Dec. 29.	8 A. M.	101½	72	18	Lips and mouth sore.
	2 P. M.	103	72	25	
	8 P. M.	105½	80	32	
Dec. 30.	8 A. M.	103	72	25	
	2 P. M.	104¾	80	32	
	8 P. M.	107	88	Irr'gular	Began to hiccough at 3½ P. M.
Dec. 31.	6 A. M.	108½			Died.

REPORT OF A CASE OF APOPLEXY.

By Dr. N. F. Brown.

In the early part of September I was called upon one morning at 9 o'clock, to visit a man who had a "fit" one hour before, and was yet unconscious. Being engaged, I did not see the patient until 11:30 A. M. This man was employed at Bay City, as a fireman on board a steamer, and the evening before I saw him he received a telegram announcing the death of his wife, who was under treatment in the country, a short distance from the city. He started home during the night and arrived next morning. This man is thirty-five years of age, and has been intemperate since early manhood. It is stated that he was very much shocked when he received the announcement of the death of his wife, as he considered her condition improving.

During the journey to the city he drank some, and about midnight had a convulsion and was placed in a sleeping car, and did not awake to full understanding till the train was nearing the city. He left the car at the Central depot in company with a comrade; took a drink of brandy and water, and started to walk to his home, in the vicinity of First and Abbott streets, and, when about half way, he suddenly fell, and as the fall was a heavy one, he became comatose in a very short time, and was carried home in a hack, arriving there at 8:30 A. M.

A notorious "doctor" living near was called in; did nothing but order counter-irritants, and left, assuring the friend that nothing could be done to avert death.

As above stated, it was 11:30 A. M. when I first saw the patient, whom I found in the dorsal decubitus, on a sofa by an open window, up chamber; deep coma, extreme lividity, stertorous respiration, slow hard pulse, pupils dilated, eye-balls protruding from their orbits, violent throbbing of the carotids, and abundant frothy exudation through the mouth and nose. In this condition I decided upon venesection, and bandaged the arm for that purpose, and, placing my hand in my pocket for my instruments, I remembered leaving my case lying on my desk after vaccinating a child.

I sent notice at once to Dr. McGraw, but he was not in at the time, and the messenger returned in a short time with Dr. Webber, who immediately opened a vein at the bend of the elbow. The blood, although very dark, flowed freely, and I kept it flowing as long as it would escape, and I judge that twenty ounces were taken, and at the cessation of bleeding there was a slight appearance of aeration. The bleeding rendered the pulse somewhat softer, yet the respiration remained stertorous.

The skin being cool, with a clammy perspiration, and the discharge through the mouth and nose unabated, the aspect of the patient was very little changed by the loss of blood, and no perceptible change in the comatose condition.

Dr. Webber and I left about 1 P. M., having been with the patient very nearly an hour, and considered that he was rapidly failing and beyond help.

At 4:30 P. M. a messenger came to my office, stating that the patient was better, and that the friends had some hopes of his recovery. Being very much surprised at this intelligence, I made haste to see the patient. Arriving, I learned that Dr. Brodie was called at 3 P. M., the patient having made some guttural noise, attracting attention. The doctor gave the friends some encouragement, but advised them to send for me.

I returned to the patient a few minutes after 5 o'clock. I examined the patient very carefully: the pulse was feeble and rapid, the exudation still continued, mingled with a very little blood, tracheal rales, extremities becoming cold, and lividity giving way to a cadaveric expression; in fact, everything indicating a speedy dissolution.

I remained with the patient one-half an hour, at which time the respiration had become irregular, the radial and temporal pulsation lost, and being asked if I could do anything more, I replied in the negative, and was in the act of leaving the house when I observed that as the man was lying, there was a slight compression of the right lung. I placed a folded quilt under his back, elevating the false ribs; this caused an abundant discharge through the mouth and nose for a few seconds, and then resumed the usual quantity. I sat down by the side of the patient, perhaps fifteen minutes, and believing that death would ensue in two hours at most, I left the house, thinking of the sad condition of the friends, looking upon the dead forms of wife and husband in the same room.

Ten days after this, I was called to visit a relative of this man, from whom I learned that the patient whom I supposed dead and buried, would in a few days more be able to resume his labor.

Questioning my informant further, I learned that shortly after I left, his breathing improved, the exudation lessened, and occasionally convulsive movements occurred, and at 8 P. M. he attempted to articulate, and after several fruitless attempts succeeded in saying distinctly, "This is hard," then relapsed into a strong convulsion, and after emerging from this a little brandy and water was given, which was immediately ejected by the stomach, which relieved him very much. Dr. Brodie was called again, duplicated my order for an enema, which was not obeyed. This was Wednesday evening. Thursday he was fully rational at times; better on Friday, but unable to stand or walk, yet in the evening he was taken to his sister's residence, in Thirteenth and a-half street, and Dr. Brodie visited him twice afterward.

On close inquiry I am led to believe that the paralytic condition was paraplegic rather than hemiplegic, as his sister informed me that he "used his arms better than his legs." He is now employed as "Look-out" on board a steamer, feels well, except, as he states, a little weakness of his legs and a slight pain in the posterior part of the head. This may arise from the fall on the sidewalk, as there was a little swelling in the occipital region.

In this case it seems to me there can be no doubt of a true apoplectic state, but the cause arises in debatable ground, as there are strong symptoms pointing to alcoholic coma, and no symptoms as I could learn of hemiplegia, yet hemiplegia does not necessarily follow apoplexy.

The great point of interest in this case, to my mind, is the *near* approach to death, and yet the patient escapes. No man can fully comprehend a case of this character unless he is an eye-witness. Each person, professional and non-professional, looking upon this man, considered death inevitable; and when I reflected upon his condition that evening between 5 and 6 o'clock, his cold body, pulseless arms, abdominal respiration, grim death in his face, I stand in awe, in presence of an unseen, yet Almighty power, and indorse the adage that, "While there is life there is hope."

OPIUM AND ITS ANTIDOTE.

By J. H. Stearns, M. D.

It is admitted that opium, in its several forms, is the great antidote for pain, and in prescribing it the dose should be regulated by the extent and severity of the pain, modified by the fact as to whether the patient's system has recently been accustomed to its use.

The custom of giving opium or morphine for mere sleeplessness cannot be too highly reprehended, or to give it where the pains are fugitive or uncertain of duration, because should the pain disappear, the full force of the drug would be expended on the brain, with perhaps dangerous or fatal results.

As to antidotes for an over-dose of opium, the brain of the profession has been exercised to an alarming extent. I believe that atropia is now the fashionable thing to exhibit hypodermically.

Realizing that opium is the antidote for pain, and that otherwise deadly doses are carried off with impunity, where the pain is excessive, we have only to reverse the proposition, and the question is solved, for we have pain as the antidote for opium. Finding the patient laboring under an over-dose of any opiate, proceed at once to inflict upon him a pain that will be persistent and continued at your pleasure. Remembering that the most excruciating torture is experienced by pressure upon terminal branches of the nerves, the most convenient way will be to apply pressure upon the ends of the thumbs and fingers. This can be done by using a small hand vice, or even the ordinary spring clothes-pins will answer every purpose, for it is astonishing to experience the amount of pain one of these little instruments will inflict with its persistent grip.

The inquisition found the thumb-screw the most effectual machine for torture that could be advised. Ephemeral and transient pains will be of little good; it is the steady and continued agony that accomplishes the work.

Accounts of cases treated on the theory indicated would be of little use, unless it commends itself to the judgment, and this paper is respectfully submitted to the readers of the REVIEW, trusting that it will receive a careful examination, in the light of of previous knowledge and experience with this powerful drug.

Milwaukee, Wis.

Original Translations.

GLEANINGS FROM FOREIGN JOURNALS.

Translated for the REVIEW by J. H. Carstens, M. D.

I.—Diarrhœa and Vomiting of Children. (By Dr. A. Baginsky, Berlin, Med. Chirurg.-Rundschau.)

THE examinations which Baginsky (Iahrb. Kinderheilk., viii Jahrg.) made in 1874, have for their object to clear up the relations of the water, the temperature of the earth and air to the above diseases of children. The towns where the observations were made were Rosenthal and Oraienburg, on the outskirts of Berlin.

1. A comparison of the death rate in Berlin from April 1st to November 1st, from diarrhœa and vomiting, with the condition of the ground water, and a tabulation of these figures for the different months shows, for a part of the period of observation at least, a complete independence of the rate of mortality from the quantity of water in the ground and its fluctuation. This independence is more evident when the comparison is confined only to the abovenamed outskirts.

2. A second comparison, of the temperature of the air with the mortality from cholera infantum [I suppose it is to this disease they refer.—*Translator.*] shows a corresponding increase and decrease of both, with the exception of a single month (September). When one makes this comparison for each week instead of month, one finds: *a.* that the increase in temperature and the increase in mortality does not take place at the same time, but that the latter takes place later; thus an increase or a decrease in temperature is followed by a proportionate increase or decrease in the rate of mortality a week later; *b.* that in reference to this the apparent exception of the month of September is not a real one, and a closer inspection proves more conclusively *the dependence of the mortality from cholera infantum upon the temperature of the air.*

3. That the temperature of the earth had any bearing on the rate of mortality from cholera infantum could not be proven.

4. Of the relation of the dwelling places to cholera infantum, it may be stated that the cellars are nothing more than breeding places of that disease.

II.—On the Development of the Contractile Covering of Vessels. (*By de M. Ch. Rouget, Revue des Sciences Medicales.*)

The latest researches have enabled the eminent physiologist of Montpelier (Compt. rend. Acad. Sciences) to put out of the question any doubt that the contractility of the cells is due to prolongment of protoplasmatic ramifications, which he had recently studied and described, on the vessels of the hyaloid membrane of the frog. (Voy. R. S. Nh p. 465.)

Such cells exist on all small vessels, even on the true capillaries of the swimming membrane of larvæ of amphibians; the capillaries are not then composed uniquely of a single membrane of cell parietes (endothelia), as he has been demonstrating the angioplastic filaments of the original vessels, but they are composed besides of a more external network of the contractile cells, which under the influence of various excitations (initial action of anæsthetics, direct excitants, etc.) contract themselves, according to disposition, into layers, producing on the small vessels a series of multiple annular contractions, giving them thus a roughened aspect. These contractile cells, and this is the most interesting point of that work, neither proceed from the primative vascular cells (endothelia) nor from the cells of the surrounding connective substance. The author has, on the contrary, frequently observed on the new vessels, yet deprived of the contractile tunic, some amœboid cells, showing their prolongations of the coats of vessels, formed later on the outside of the contractile network. The amœboid pigmentary cells and ramifications contain the first elements of the adventive tunic, properly so called. Those observations brought together with those that he has made before on the role of the amœboid cells (leucocytes) in the formation of the secondary tunic of the vessels of the hyaloid of the embryo of mammals, the author concludes that contractile elements of the small vessels supplying it have the same origin, that is to say, that they might be produced by cellular migratory elements.

A CASE OF DEATH BY SYNCOPE, *happening suddenly three-quarters of an hour after Thoracentesis, performed by Aspiration, to relieve a case of Pleuritic Effusion of Traumatic origin, and Reflections upon the cause of the sudden death.* (*By Dr. A. Legroux, Annali Universali de Medicina.*)

Translated by Edward Watson, M. D.

Dr. Legroux, in speaking of the deaths supervening upon the course of pleuretic effusions, says that it has been especially observed in those cases which occupy the left side, and that the prognosis of a termination so liable to be fatal is always a great weight in the indications for operative intervention. These terrible prospects, he says, enjoin the necessity of eliminating by puncture, such a quantity of effusion, which every instant menaces the life of the patient. He also adds, that if such observations are rare, it is probably from the fact that many physicians withhold from the public their unfavorable cases.

In the case of Dr. Legroux, a man, while doing his work in the kitchen, fell upon a kettle, receiving a severe contusion on the left side, without any evidence of fractures of the ribs. After two weeks of detention in the hospital the patient was able to return to his labor, but at the end of fifteen days he was taken with a severe pain at the seat of the recent injury, accompanied by a very painful cough, complaining that he felt as if there was a bubbling in the part affected. The examination of the chest showed an enlargement of the entire left side of the chest; the intercostal spaces were distended; there was absolute dullness on percussion over the whole side, both before and behind; there was exaggerated breathing to a level with the middle of the chest; remarkable ægophony; the heart was displaced as much as five centimetres; the apex-seat was on a level with the left margin of the sternum, and the epigastrium was raised and lowered with every beat of the heart; respiration of the left side was deficient; the pulse was rapid, small and compressible. The patient remained in the sitting posture, and when he attempted to take a horizontal position for a moment, he would recline to the right side, and was in great dyspnœa and incipient cyanosis.

After having tried for twenty-four hours a treatment by digitalis and drastics, which produced but very little relief, and that only transient, it was found urgent and with reason to resort to thoracentesis. This was done with a medium-sized canula by aspiration, and was conducted without any accident. After the extraction of about 2,000 grammes of a lemon-colored liquid, the patient commenced to be troubled with that cough which we so frequently observe during the puncture of the chest. Legroux thought it now time to withdraw the canula.

Resonance returned in the upper part of the chest; auscultation showed that the respiration had returned to the upper two-thirds of the left lung; the heart returned to its normal position, which was accomplished at 11 A. M.

The patient continued to cough for a quarter of an hour, and three or four times he raised a frothy sputum, of a reddish-white color; the cough then ceased. The patient commenced to talk with those around him, to whom he said that he felt better, and having been assisted to his bed, Dr. Legroux left him in that position, completely satisfied with his expectations. But after he had gone, three-quarters of an hour after the operation, just as the patient had asked for a drink, he suddenly exclaimed, "Oh, I feel—come to me!" he turned his head aside on the pillow, and ceased to breathe.

The autopsy, made forty hours after death, did not furnish any explanation of this unexpected accident. In the thoracic cavity there was found two litres of serum. The pleura was covered over its whole surface with a false membrane, more or less dense, fibrinous, and of little resistance. The lungs were lying close to the spinal column, and were as large as those of a robust man. There were two bands of adhesion firmly attaching the anterior inferior angle of the lung to the fifth, sixth and seventh ribs, which could only be separated by the bistoury; on a level with these adhesions were three old fractures. The right lung was a little congested, with slight adhesions between the interlobular spaces; there were no tubercles.

The pericardium contained a small tumblerful of serum. The right side of the heart was considerably distended. The cavities were absolutely free from clots, the valves were a little fringed upon their borders, without vegetation. The pulmonary vesicles in either lung did not show any trace of obstruction. The meninges were healthy and pale. The brain, grown a little soft through putrefaction, was rather pale than congested, and its vessels perfectly free, without atheroma. The fourth ventricle seemed a little congested, and had a reddened appearance, with varicose development of its superficial vessels, which has been described in autopsies in diabetic subjects. The urine did not contain sugar or albumen.

The author, after having this autopsy, not being able to assign a cause for this sudden death, did not doubt but that the patient died from syncope, on account of the rapid elimination of the liquid from the thoracic cavity.

After various considerations upon the modes of death, the author arrived at the following conclusions:

1. That instant death frequently occurred in pleurisy with abundant effusion, and especially from waiting too long when paracentesis should be performed, and a large quantity of fluid be removed.
2. That instant death may occur in certain cases from syncope.
3. That the entire evacuation of the pleural cavity should be done slowly, or better twice than at one operation.
4. That the aspirator might be accused of having been at fault in this accident.
5. Finally, that the operator must watch the patient and repair the slightest symptoms of syncope, with stimulants and the horizontal position, etc.

A SUDDEN DEATH AFTER THORACENTESIS, *caused by Hemorrhage from the Arteria Gastro-Epiploica Dextra, produced by a perforating ulcer of the Duodenum, having remained latent during life.* (*By Dr. Liberman, Annali Universali di Medicina*)

Translated by Edward Watson, M. D.

The author reported to the society of the hospitals an observation, supported by an anatomical specimen, which proves that sudden death after thoracentesis may occur from causes entirely independent of those arising from the operation, and be nothing more than a simple coincidence.

A soldier, age twenty-four years, of a moderately good constitution, who was never before sick, entered the hospital of Gros-Cællon, with all the symptoms of pleuritic effusion on the right side. Palpation practiced, carefully and thoroughly upon the abdomen, gave assurance of the condition of the liver, which was perfectly free from pain, and movable.

The effusion, not being modified by blisters, Dr. Liberman made a puncture with the apparatus of Dieulafoy. After five days, the liquid having been reproduced, the operation was repeated; a third one, after eight days, removing 1,800 grammes of a liquid entirely purulent. The patient submitted to a number of successive punctures, which gave him great relief. He never complained of pain in the abdomen.

Half an hour after the eighth puncture, the patient was seized with a desire to evacuate the bowels; there was a free evacuation and he insisted upon remaining over the vessel; when, without any warning, he became pale and fell dead, after having passed about two tumblerfuls of a sero-sanguinolent liquid.

In the first place, the author believes that the death was caused by syncope The autopsy, conducted with great diligence, did not reveal any local disorder about the puncture. There was found an ulcer of the duodenum, involving all the intestinal walls, and encroaching upon the pancreas; the arteria gastro-epiploica dextra was perforated by an ulcer about one-half millimetre long.

The author concludes that in cases of sudden death immediately after thoracentesis, we should also search after other lesions, which may have been the cause of death, entirely foreign to the operation of thoracentesis, among which he enumerates congestion of the lungs, a slow asphyxia, embolia, etc.

OF PROPHYLAXIS *applicable to Emigrants against Yellow Fever.* (*By Dr. Perez. Annali Universali di Medicina.*)

Translated by Edward Watson, M. D.

The author believes that emigrants can protect themselves against yellow fever by resorting to a course of treatment, either with coffee, arsenic, mercury or alcohol, the treatment to be commenced previous to the migration. Perez cites the observations of other persons, who, after having been treated with these remedies, were possessed of complete immunity.

One emigrant who was subjected to this preventative treatment, was nevertheless attacked by yellow fever, but the disease was aborted, and the symptoms were benign.

Another emigrant migrated and lived in Havana without having been attacked by yellow fever; but in a second voyage he neglected to avail himself of these precautions, and was this time attacked by yellow fever.

The author refers to other similar cases, etc.

Reports of Societies.

PROCEEDINGS OF THE NORTH-EASTERN DISTRICT MEDICAL SOCIETY.

The annual meeting was held at Metamora, Tuesday, February 8th, 1876.

The society was called to order by the vice-president, Dr. J. C. Wilson.

The secretary being absent, Dr. Yates was elected secretary *pro tem.*

On the calling of the roll, the responses showed a fair representation of the district.

On motion, the reports of the secretary and treasurer were adopted.

The election of officers was made the order of business for 2 P. M., and the society proceeded to the discussion of the topic "Treatment of Phthisis."

Dr. KNIGHT, of Utica, said, introducing the subject, that it was of too great importance to receive justice from any member in the short space of ten minutes. The treatment adopted by different physicians is so varied that it is difficult to describe, and a uniform mode of treatment can not be pursued, since the disease arises from so many different causes. The most common cause found in country practice is pneumonia or bronchitis, and in treatment I am partial to the use of counter-irritants applied to the breast, my most common one being croton oil. I do not believe in the administration of strong expectorants. I might give mild ones, if combined with good tonics. For toning up the system I give such as tincture of iron and glycerine, citrate of iron and quinine, and strychnia; as alteratives, I use the iodide of potassium, iodized oil, and the phosphates. In the ulcerative stage I am partial to use of opiates, alcoholics, and good nourishment, pure cod liver oil, etc., but as a rule in advanced stages our treatment is not very satisfactory. By early treatment cases are sometimes cured or prevented from pursuing a further course.

Dr. J. E. WILSON, of Rochester, said: The treatment of phthisis is not very satisfactory, either to myself or patients. I believe that our researches have not been sufficiently thorough in the incubative stage. In the early stage, when I find the temperature 101° or 102°, with loss of elasticity of the lung, with prolonged expiration, I order out-door exercise, even in winter, and if patient has means, would advise him to go to a part of the country having a dry climate, irrespective of heat or cold, and of high altitude, or to parts where immunity from the disease is known to exist. If my patient is plethoric, I should use leeches; I might possibly bleed him, as there is certainly tubercular inflammation; would give him cod liver oil (not wagon grease), with ferri et quinia and glycerine; have used the chlorides, phosphates, etc., but without benefit.

Dr. Brownell, of Utica, said: Having no statistics with me, I cannot speak so interestingly on the subject as I might if I had them; but will say that my practice has been more satisfactory of late than formerly. In the early stages the disease is amenable to treatment, and I so declare it to the patient, and this very declaration does him real good, by re-assuring him. Having secured the confidence of the patient, I would treat him similarly to cases of hip-joint disease, or others of a scrofulous character; later would use efficient nutrition, and if possible with tonics that agree with the stomach. I regard the stomach as of vital importance, and in those cases of irritable stomach which cannot bear cod liver oil, would give arsenic, strychnia, with vegetable tonics, until they can bear the use of the oil. With regard to the fever, I usually control it by the use of baths, aconite or digitalis, carrying on at the same time time the previous treatment. I use pure cod liver oil, gentian, columba, ferri et quinia and strychnia in infusion of orange, and from such treatment I am well satisfied that I have had cases of recovery. In cases of vicarious hemorrhage, I try to restore the menses, and thereby ease the lungs. With regard to out-door treatment I agree with Dr. J. E. Wilson.

Dr. Reynolds, of Orion, said: Believing as I do, that vitiated assimilation tends to make tuberculosis more rapid, I do my best to restore the lost vitality of the patient. With regard to counter-irritants, I agree with Dr. Knight; would give cod liver oil where it can be borne, with fish diet, but above all, the sheet anchor is the confidence of the patient, and we *must* secure it. I have now a patient, a member of a very scrofulous family, who has now a cicatrized cavity in the left lung, with marked amphoric resonance, but who has now no symptoms of tuberculosis.

Dr. Nash, of Lapeer, said: As pathology and therapeutics are in such an unsatisfactory state, I will confine my remarks to climatic influence; would advise persons of means to change their places of residence, and physicians must post themselves to be able to advise the patients correctly. Those cases of an inflammatory type must not be sent to the same place as those of an almost opposite type, and *vice versa;* would advise persons, according to their symptoms, to go to one of the following parts, namely: Colorado, either of the Carolinas, Minnesota or Flórida. Have seen two cases who were cured by a sea voyage, said voyage lasting from one to two years. Change of residence from the east to the State of Michigan has in some cases done material good. Have little confidence in therapeutics in advanced stages.

AFTERNOON SESSION.

The society being called to order by the president, the election of officers for the ensuing year was declared in order. The result of the ballot was as follows: For President, Dr. Brownell, of Utica; for Vice-President, Dr. Kenney, of Lapeer; for Secretary and Treasurer, Dr. Yates, of Washington.

The admission of new members being now in order, a committee of two was appointed to examine the credentials of H. J. Reynolds for admission to membership.

The committee reported favorably, and H. J. Reynolds was unanimously elected to membership.

The discussion of "Phthisis" was resumed.

Dr. McColl, of Lapeer, said: I view phthisis as of two types, namely, tuberculous and catarrhal; in the first, prognosis is grave, while I believe the second type to be amenable to treatment. I may here say that tubercular phthisis can never be cured by climate or otherwise. I believe that the second type spoken of arises most commonly from cases of broncho-pneumonia that have not gone on to resolution. The medical treatment spoken of already I recommend. Would advise those patients who enjoy the best health during the summer to move south to a warmer climate during the winter season. I think that sometimes tubercular phthisis is produced by the non-resolution of broncho-pneumonia.

Dr. Kenney, of Lapeer, said: Have had two cases of pleuro-pneumonia where it has gone on to the formation of abscess, and large quantities of pus were drawn off, and each of the cases ended in recovery. I believe, with Dr. McColl, that the catarrhal type is quite amenable to treatment. Have known phthisical cases to recover by moving to a malarial district. But the greatest of all obstacles to successful treatment is the interference of outsiders, and as soon as I find that my patient is dissatisfied, and does not implicitly follow my directions, I treat him no more.

Dr. Stone, of Metamora, said: I believe that phthisis arises from low vitality, and if the patient applies for help early his case is amenable to treatment. I believe that phthisis is partially excited by malaria, and consequently benefited by quinia. Cod liver oil is good, but I believe that sweet cream and fresh meat is just as good. Would recommend out door exercise, flannel clothing to be worn; would order nourishing diet, and would give opium and quinine, as I believe that they partially arrest the disease in this climate.

Dr. J. C. Wilson, of Rochester, said: I don't believe that tubercle can be deposited in the lung and remain there without producing suppuration, and we have as yet no known remedy to prevent the suppuration of tubercle, and as soon as we have tubercle deposited we have prolonged expiration. I believe that inhalation is and will be the true mode of treating this disease. We must positively nourish our patient during treatment, and I do not believe a change of climate is followed by any material benefit. I would not advise my patient to throw away the luxuries of a comfortable home to go to die among strangers in a foreign land.

The discussion being ended, the following members were elected delegates to attend the national convention, to be held about next June, at Philadelphia: Dr. Kenney, of Lapeer; Dr. Wilson, of Rochester; Dr. Nash, of Lapeer; Dr. Brownell, of Utica; Dr. Stone, of Metamora.

The following resolution was offered by Dr. Brownell, of Utica, and seconded by Dr. Nash, of Lapeer:

Resolved, That the present status of the Medical Department of the University of Michigan is very unsatisfactory to the members of this society.

Carried without a dissenting voice.

The subjects for discussion at the next semi-annual meeting to be cholera infantum and such others as the president and secretary may choose.

On motion, the society adjourned to meet next June at Rochester, Michigan, subject to the call of the president and secretary.

J. E. WILSON, M. D., *President.*

ALBERT YATES, *Secretary.*

Correspondence.

THE CREDIT SYSTEM IN MEDICAL PRACTICE.

Last fall a young man came into my office and said: "Doctor, I want a dose of bilious pills." I handed him out three comp. cath., U. S. P., pills. He received them into his hand and gave them a slight toss, and they disappeared through his intermaxillary hiatus, to be seen no more, and thereupon the following dialogue ensued:

Patient—Well, Doctor, you will have to charge this.

Doctor—You are asking a good deal of trust from a stranger.

Patient—I aint a stranger; you've an account against me.

Doctor—I guess not; what is your name?

Patient—G—— K——; look and see if it is not on your book.

Doctor—I do not find your name on my book.

Patient—It ought to be there I was in here three years ago and got three pills, and told you to charge them.

Doctor—You must mistake about this. I think you must have called on some other Doctor.

PATIENT—No I aint. Your name's Doctor Chase. I never change doctors as long as they do well by me.

Now, Mr. Editor, I wish to inquire of your readers if they have cases like or similar to this. If they do have, I would like to know what their treatment is. I do not want any treatment based upon theory; if any treatment is reported, I want that of actual experience. Theoretically I ought to have kicked that man into the middle of the street. I did not do that. I took down my day book and charged him one-half dollar.

During the early years of my practice, and occasionally now, I get up in the night and go into the country, from 6 to 10 miles, and attend a case of obstetrics for a stranger. When I am ready to go home, they will say, "Well, doctor, I haven't any money now, but I will call before long and pay you."

All of the rest of the doctors about here do busines in the same way. If this is the customary way of doing business throughout the State, I think it needs a revisal. A stranger ought to bring or send along the ordinary fee for such service, or they ought to bring an order from the Township Supervisor for an attendance upon the case.

Our lax way of doing business robs us of a great many thousand dollars a year; enough to set on substantial legs a medical college, in the city of Detroit, free from all suspicion of supporting charlatanism.

I want to set the brethren to thinking about these matters. After thinking, there will come action that will result in a cure.

DR. MILTON CHASE.

OTSEGO, Allegan Co., Mich., Feb. 28, 1876.

MEDICAL MATTERS IN PARIS.

PARIS, Feb. 9, 1876.

To the Editor of the Detroit Review:

Although Paris has lost much of its former prestige in regard to medical instruction, yet all the opportunities which it offered to the medical student of twenty years ago exist still to-day, either in their original or in a much improved form. She can boast no more, however, of the hundreds of Americans who daily visited her hospitals, thronged her amphitheatres, or filled her laboratories and dissecting halls; for in the time that has since passed away, our own hospitals and colleges have so greatly improved that they now offer great advantages to the student, while, during the same period, France's great rival has so perfected her means of education, by the numerous chairs which she has created, and by the lavish expenditure of funds which she has made, that the foreigner is irresistibly attracted towards her universities, greatly by the realities which they offer, and some by the reputation which they have gained. As the mass of the French people preserve the memory of their late defeat by the Germans, so do the savants of the nation behold with dismay the consideration which is now given to German studies and opinions. Lately they have striven with all their efforts to secure the means for instruction which are now wasted from the want of the suitable buildings; and once the national purse was opened by their comparison of the French clinical buildings with those of their neighbors, the sum of two million and a half of francs was set aside for the reconstruction of the Ecole Pratique and the clinics of the faculty of Paris. All the structures will be completed for the year 1879, and then Paris, as of yore, will open her doors to the stranger, offering such a combination of advantages, including even the few which she does not already possess, that as no other city on the continent is her equal in point of beauty, so will she possess no superior in the point of medical education. Even now she is the city which offers the greatest resources for dissection, for nowhere can subjects be found in greater number, as independently of those which the numerous hospitals furnish, many of the departments around Paris send the bodies of all their dead prisoners to Clamart or the Ecole Pratique. The latter is situated in the heart of the Latin quarter, and, although its appointments are not so complete as the former's, still, its proximity to the Ecole de Medicine, and the rooms of a great number of the students, causes it to be much frequented. More than a thousand cadavers are yearly required for the uses of this institution, while Clamart demands from two thousand to twenty-five hundred, as while the former is opened only during the scholastic year, the latter is continually accessible. The charges for dissecting material are now moderate, as both establishments furnish it to the student for the sum of twenty francs per term.

The winter months are usually reserved for strict anatomical work; but even during that season, by a slight additional payment, private operative courses can be commenced at any moment. But during the spring and summer term, no extra charge is demanded, and then the halls are entirely given up to surgical operations upon the cadaver, and to all the different physiological experiments upon the living animals.

Clamart occupies a position which is somewhat distant and difficult of access, as no omnibus line passes near it, but laying this slight disadvantage aside, the accommodations and conveniencies are much superior to those of the Ecole Pratique, while, at the same time, the abundance of material is somewhat greater.

One of the most frequent objections urged against Paris as a place for study, is the distance which exists between the different hospitals, and, under certain circumstances, I confess it is a valid one. For example, if a person takes up his residence in some one of the distant parts of the city, he is sure to find a hospital near him, but certainly he will be widely separated from all the others. But let him reside in the heart of the Latin quarter, which, by-the-by, is not at all to-day the same as the descriptions of the French writers would lead us to imagine, and he will have half a dozen within the distance of a few minutes walk. With a little trouble, after consulting the numerous advertisements and circulars, or, still better, a little volume entitled the student's guide, he can form his programme, and I feel confident that his greatest embarrassment at first will be how, during the usual working-day, to attend courses which will occupy at least sixteen to twenty hours. The clinics are so numerous and varied, that the student can always find several good ones in no matter what specialty he may desire to pursue, while, at the same time, the professors and assistants are very affable, devoting much time and attention to all strangers. The branches which fare the poorest in that respect, however, are obstetrics and gynæcology, for, as the practice of the first, in France, is greatly reserved to the midwives, the Maternity hospital, the largest of the two lying-in houses, is entirely closed to all male students, while the latter, though the clinics are numerous, from the very nature of the examination, and from a want of a system of rotation among the students, can hardly be pursued with advantage. But for special and general medicine, for regional and general surgery, for diseases of the eye, ear, larynx, and urinary organs, the student can find all he desires, and attend each and all of them free of charge. The same holds good for physiological and chemical work in the laboratories and for microscopy, but in the latter branches, however, there are private as well as public courses. In pathology, besides the professor of the faculty, there are several lecturers among the corps at the Ecole Pratique, but as they, at present, possess no means of practical instruction, and will not, until the completion of the buildings of which I have already spoken, they can offer no inducement to the stranger to follow that study, in a particular manner, while in this city.

The hospitals of Paris are twenty-two in number, two of which are not quite finished, and one of which, the new Hotel-Dieu, almost completed, will surpass all the others in point of construction and convenience. It is situated almost directly opposite the old, so long and so well-known one, which, during its many years of service, has numbered among its staff almost all the great French medical men, who have during that time flourished and died. The new hospital has been a subject of discussion between the civil authorities and the faculty, from the very moment of the conception of the project up to the present time, for, indeed, there was a strong opposition urged against its situation, before even the plans of the building were completed, and only a short time since the upper story was torn down by the advice of the physicians. The manner in which this came about was quite comical, as, in fact, a misunderstanding was at the bottom of the matter. The doctors thought the number of beds, which the hospital was destined to contain, was too great, and that the effects resulting from this would prove deleterious to the future patients. They accordingly notified the board to that effect, but for some unknown reason of their own, the latter ordered the demolition of the upper story, thinking very properly, in looking only at figures, that the number of beds would thus be reduced. Imagine the consternation of the faculty, after some days, to find that their hospital had lost a story, while, at the same time, the number of cubic feet of air for the sick had not been increased. By these discussions and alterations, by the war and the overthrow of the empire, the construction of the building has been much delayed, but the authorities have lately pushed the work very energetically forward, so that the near future will see it ready for the reception of the unfortunate.

The finest hospital which the French possess is that of Lariboisere, situated on the right side of the Seine, but some distance from the river. The wards are all situated in buildings which are wings of an immense central one, which is constructed in the form of a hollow square, which contains the spacious corridors, the offices, amphitheatres, laboratories and stair cases. The corridors, the external walls of which are formed of glass, look out upon the square which occupies the centre of the building, and which being formed into a very handsome garden, affords a capital spot for the convalescents to enjoy the open air. The general finish of these halls reminds one strongly of St. Thomas' Hospital of London, but the latter, in almost every respect, I may say, surpasses its French rival.

The lack of unity of feeling and sentiment which prevailed between the faculty and students a few years ago seems to have entirely diappeared, and everything this year has been very harmonious between them. A few days since, a grand ovation even was tendered to one of the former, who occupies the chairs of histology and pathology, Mr. Robin, on the occasion of his election on the liberal side as one of the new senators of the republic. The demonstration was all that could be desired, but at the same time it may not be amiss to add that he was one of the least popular of the professors, and that on the former occasion he was one of the worse treated.

Though there are at the present time the five medical faculties of Paris, Nancy, Montpelier, Bordeaux and Lyons, existing in France, the number of practitioners does not increase, for though the universities are well attended, yet as so many of their graduates undergo the examinations simply for the object of obtaining the privileges and honors which the title of physician may confer upon them, the active working corps has remained numerically about the same for many years past. Though this is the case, we do not find the halls of the medical college, as so many of our medical journals informed us about a year since, filled with notices from different cities demanding doctors; and yet, according to our ideas, the French cities are indeed poorly supplied with medical men, for I understand from good authority, that there are many places of twenty thousand inhabitants with two or three doctors, and still more of ten thousand with only two. I wonder what American town of five thousand could say the same.

The expenses of living in France increased some after the Exposition, and the taxes of the late war have also made their impression upon them, so that the prices are now generally higher than those of 1866. During the same time the same thing has occurred in Germany, so that at the present moment the same scale of prices exists for all the large cities of the continent. As far as mere boarding and lodging are concerned, moderate New York rates will give a pretty fair idea of the ruling prices here, though naturally the French table is the better of the two for the same money.

Hoping these few notes may prove of some interest to a few at least of your numerous readers, I remain,

Yours, etc., E. A. CHAPOTON.

THE STORY OF MEDICAL LEGISLATION RESPECTING THE INTRODUCTION OF HOMEOPATHY INTO MICHIGAN UNIVERSITY, AS COMPILED BY AN ALUMNUS OF THAT COLLEGE.

JACKSON, Mich., March 20, 1876.

Editors of the Detroit Review of Medicine and Pharmacy:

GENTLEMEN—Sometime in January I commenced the preparation of a letter for your columns, designing to review somewhat in detail the paper of Dr. Rynd, published in the *Peninsular Journal* for December, but from that date until the present my time and attention have been so completely occupied with other matters as to make it impossible for me to do anything further in that direction. With your permission, I desire now to place on record some observations touching certain points in that letter which seem to me calculated to lead its readers to erroneous conclusions concerning the causes which led to the introduction of homeopathy into the university in its present relation to the medical department.

Premising, at the outset, that these remarks are prompted by no feelings inconsistent with the profession, not only, but in the *exercise*, too, of a spirit of "charity toward all" which "thinketh no evil," I yet cannot deny that some of them may, from the necessities of the case, bear somewhat heavily upon the animus so evidently displayed in some paragraphs of the letter under consideration.

It might be supposed that one belonging to that class of "afflicted persons" who "may be treated with calm indifference," should, under the disdain of His Serene Highness, the medical regent, feel ashamed to further "exhibit a solicitude for the honor and dignity of the medical department of the university," or express a desire for the continuance of her good work in upholding the standard of a thoroughly educated and strictly honorable medical profession. Nevertheless, while not wanting in veneration for the august "powers that be," I cannot but gather courage from the reflection that any thesis on practical questions, from whatever source emanating, which substitutes for an impartial statement of the whole case, the publication of isolated facts, so arranged as to compel false inferences, and descends from the place of legitimate argument to the level of mean insinuation and affected contempt aimed at those who hold different views, thereby weakens its claim to the respect of thoughtful and candid readers, while at the same time it may do much, through the weight of authority which it carries, to mislead those who are not fully informed, or are not critical analysts of what they read.

Under the influence of such considerations, the perusal of Dr. Rynd's letter served to strengthen me in the belief that "just at this time" is pre-eminently *the* time when every true lover of the medical college should manifest an interest in her welfare, on the principle expressed in that accepted maxim, "A friend in need is a friend indeed." In other words, it seems to me that when the constitutionally-appointed trustees of the university are found pursuing a course toward any of her departments which cannot be defended by better logic than that letter displays, it is high time for the olfactories of her outside friends to admonish them of "something rotten in Denmark."

It is a fact of general observation that strong expressions of men's deeper sentiments on any subject are elicited only by the occurrence of some adequate occasion; and herein may be found a simple key to the problem which seems so strange and inexplicable to the gentlemen, viz., that while the regents and medical faculty stood firm in resisting encroachments on the rights of the institution—thus seeming to warrant the confidence that her interests were safe in their keeping—her alumni and patrons maintained comparative silence concerning a matter which did not then require active interference on their part. But, since an occasion has arisen through the trusted guardians who formed our vanguard having abandoned their position, let them not wonder if the rank and file shall open such a "fire along the whole line" as will enable them to estimate more correctly the "breadth and depth and length and height," both of that "love for the medical department," which is indeed "neither more nor less than it was" "prior to the action of 1875," but ever loyal in the hearts of her sons; and also of that higher and more sacred sentiment of devotion to principles of professional rectitude which sits enthroned, with sovereign authority, in the moral sense of true physicians, the world over.

Inasmuch as the regent started out with the avowed purpose "to submit a few facts bearing on this unhappy controversy," it seems unfortunate for his cause that the facts stated should be *so* few, and the place of the many omitted should be usurped by professions of devotion to the university, which sound well but prove nothing, and by efforts to bolster the medical faculty, and hedge them in their chosen "paths of glory" by swelling terms of praise, as if he considered them, through the inherent weakness of their own defense, in dire need of a champion. Whether he has not proven himself a "blind leader of the blind," with the consequences predicted in holy writ for such leaders, through one of his "few facts," is a question which, if it has escaped the discernment of any of his readers, has been sufficiently noticed in the *Peninsular Journal* for February.

Taking up Dr. Rynd's historical facts touching legislation on university matters, it will be my endeavor to complete the story, that your readers may estimate understandingly the extent to which "all interests in every department of the university" have suffered from "the damaging strife" which he portrays. He says, "In 1855 a law was enacted by the State 'that there shall always be at least one professor of homeopathy in the university of Michigan.' The regents, finding serious obstacles in the way, refused to make such appointment." * * * "In 1867 the legislature was solicited for help, which was granted on condition that the law of 1855 be executed. The regents then determined to appoint a professor of homeopathy, to be located at some town in the State other than Ann Arbor. This was decided by the Supreme Court as not in compliance with the law. And so the war continued and progressed, in the legislature, at the university, and in the courts, until the last session of the legislature.

The regents refused to carry out the act of 1873, because no money had been appropriated for that purpose, and on the ground, also, that through the constitution *they* had been entrusted with the "general supervision of the university."

During the last session of the legislature a bill passed the senate, but failed to pass the house, making an appropriation for the teaching of homeopathy at some point other than Ann Arbor. Soon after * * * a bill passed both house and senate making an appropriation of $6,000 per annum for teaching homeopathy at Ann Arbor. The regents were not in any way related to this bill.

Some members of the board, however, the writer being one of the number—in view of the damaging strife which had so long existed, out of regard for all interests in every department of the university, the proper and efficient maintenance of which demanded aid in excess of students' fees, and the university interest fund to the amount of $50,000 per annum, and with an earnest and honest desire to establish that harmony and coöperation with the legislature, which appeared not only imperatively necessary but highly proper, expressed a desire of which the following quotation is a fair illustration :

"To use every honorable and proper effort to bring the regents into harmony with the legislature in the management of university affairs."

Words of similar import are found in the famous faculty statement, where it is said, "the medical faculty were charged with defeating the public will by their prejudices and pertinacity, and with standing in the way of the prosperity of the university as a whole."

I think it safe to say that these statements can have but one object, and that is, to convince their readers of the existence of an uncompromising strife between the legislature on the one hand, and the regents—backed by the medical faculty—on the other, arising from the refusal of the latter to carry out the homeopathic enactments, persisting without abatement up to last winter, and having the result to deprive the university, *in all its departments,* of the aid which it needed from the State. After reading the portion of this history which has been omitted by the regents, our conclusions may be modified.

The legislature of 1855 passed an act by which they sought to condition the powers vested in the regents of the university by the law of 1851, on the maintaining of a chair of homeopathy.

In this instance, as also in 1867, and again in 1873, the regents settled back upon their constitutional right to the exclusive control of the university, and defied with impunity the law-making power of the State.

It is true that the legislature of 1867 authorized the assessment of a tax of one-twentieth of a mill on each dollar of ratable property for the benefit of the university, conditioned on compliance with the homeopathic enactment of 1855 ; but it is also true that the next legislature (1869), amended the act of 1867, made an unconditioned appropriation of $15,000 annually, and decreed that the fund already accumulated under the provisions of the act of 1867 be paid to the treasurer of the board of regents.

In 1871 a special appropriation was made of $37,500 for each of the years 1871 and 1872, for building the new hall, this amount to be added to and incorporated with the State tax for those years.

On February 13th, 1873, an act was approved donating $25,000 to complete the new hall, and $13,000 to cover a deficit in the revenue of the university for that fiscal year.

On the 4th of March, same year, an enactment was received at the Governor's office, and became a law under the constitution without his approval, by which the law of 1869 was repealed, the one-twentieth of a mill tax again established, and the taxes levied and assessed under that law, ordered to be paid to the treasurer of the board, "as though such law had not been repealed."

The operation of this law (which is still in force) was limited only by the proviso that, in case the amount accruing from it, should, prior to 1881, exceed $50,000 annually, then only $50,000 annually should be so assessed. The amount actually realized from this bounty, by the university, has been thus far, $32,500 per annum, but the proviso attached shows that the legislature contemplated the possibility, at least, of its increase within eight years to the limit of the university's needs, fixed by regent Rynd; and the president of the university, in his last annual report said: "If an institution like this is really doing what it ought, its needs, its demands, must constantly increase. It was in wise recognition of this fact that the legislature of 1873 set apart for the aid of the university a tax of one-twentieth of a mill on the ratable property of the State. It was expected that as the State should grow in wealth, the income of the university would be increased."

On April 1st, the enactment was passed which Dr. Rynd refers to as "the act of 1873," providing for the appointment of two professors of homeopathy. Inasmuch as all the appropriations of this year (1873) antedate the homeopathic law, their passage was of course, not contingent on its execution. To epitomize—during the period of the "damaging strife," that is from 1867 up to the last session, the legislature has granted aid to the university, "in excess of students' fees, and the university interest fund," as follows, annually:

From 1867 to 1869, the amount of the one-twentieth of a mill tax.
From 1869 to 1873, $15,000 per annum.
From 1873 to present time, the one-twentieth of a mill tax—$32,500 per annum, which latter, in the intention of the legislature, was to increase to $50,000.

Special appropriations:

In 1871, $37,500 for two years—$75,000, for new hall.
In 1873, $25,000 for hall, $13,000 for deficit.

These figures are not exhibited as showing gifts to the university equal to its needs, or gifts which the State should be proud of, but as being sufficient to suggest the inquiry—if such has been the "bounty of a great State, in its relation to a great university." Notwithstanding the efforts of "the bar of professional judgment "to abolish" it, and despite the defiant attitude of the regents, and "pertinacity" of the medical faculty, to what sublime proportions might it not have attained, if untrammeled by these obstacles "standing in the way of the prosperity of the university as a whole," it could have had "free course" to "run and be glorified?"

Taking now the appropriations of the last session in their order, we may find instruction in their history also:

(1) SENATE BILL No. 85.—Appropriating $5,000 for a supply of water to the university. *House—Passed April 1st; vote, 57 to 15.*

(2) SENATE BILL No. 84.—Appropriating $13,000 to pay outstanding warrants of university. *House—Placed on order of third reading April 1st.* A motion to amend by proviso that the regents appoint two professors of homeopathy was voted down. Motion to amend by providing that the treasurer of board pay $407.73 to Genesee County for expense of finding dead bodies unlawfully procured for medical department; lost. Bill was then not passed. Vote reconsidered and bill laid on the table. April 13th, bill taken from the table and passed without opposition; vote, 65 to 24.

(3) SENATE BILL No. 165.—Appropriating $6,000 annually for homeopathic college at some other town than Ann Arbor. Passed Senate April 13th; vote, 21 to 4. Returned from House April 22d. Amended to locate at Ann Arbor, and passed by vote of 17 to 8.

(4) HOUSE BILL No. 216.—Appropriating $21,000 for school of mines. *House*—Substitute recommended by committee March 9th. Substitute concurred in, ordered printed, referred to committee of whole, and placed on general order. April 1st, taken from committee of whole and re-referred to committee on university and normal school. April 8th, reported back to House with amendments. Amendments concurred in, bill referred to committee of whole, and placed on general order. April 26th, reported back to House with amendments. Amendments concurred in, and bill placed on order for third reading. *Passed House April 27th; vote, 58 to 28. Passed Senate April 28th; vote, 25 to 1.*

(5) HOUSE BILL No. 518.—Appropriating $6,000 for dental school. *Passed House April 27th; vote, 64 to 19. Passed Senate April 28th; vote 22 to 6.*

(6) HOUSE BILL No. 245.—Appropriating $8,000 for hospital. *Passed House April 28th; vote, 63 to 13. Passed Senate April 29th; vote 26 to 3.*

It will be observed that the water appropriation was passed twenty-two days, and the deficiency appropriation nine days before the homeopathic bill. Two efforts were made in the House to kill the deficiency bill, plainly actuated by hostility to the medical department, but they failed, and doubtless for the reason that this bill was one which involved the interests of the entire university. As regards the appropriation for a school of mines, a substitute for the original bill was recommended as early as March 9th. In its subsequent history it was twice referred to committee of the whole and placed on the general order, once referred back to the committee on university and normal school, which committee returned it amended. From the committee of the whole it was the second time returned to the House with amendments. All the changes made or suggested on this bill, in so far as the legislative journals show, were confined to the committees, and the House concurred in the substitute recommended by the committee on university, etc., in the amendments made by the same committee, and in those made by the committee of the whole. It had a difficult passage, owing to its inherent defects, but there is nothing to show that the homeopathic proclivities of members had anything to do with the delays of its passage.

The homeopathic quarrel, as we have seen, did not prevent sundry appropriations to the university being made by former legislatures, and we think we may fairly conclude that none of those made during the last session were seriously affected by it, unless it were those for the hospital and the dental school, which were looked upon as gifts to be made more especially for the benefit of the medical department.

But, if it be admitted that these two appropriations could not be passed until after the homeopathic enactment was made, there is still a link wanting, for their passage followed very closely on the heels of that of the homeopathic bill, and the regent assures us that "subsequent appropriations were not secured as the result of a bargain with any member of the legislature or any other person," and that he "did not then, or at any time prior to the 11th of May, 1875, make any public announcement as to the probable action of the board." Is he not, to use his own words, "endeavoring to prove altogether too much," when he asks us to believe that the legislature had for twenty years denied needed aid to all departments of the university, on account of non-compliance with the homeopathic enactments, and at the same time tries to convince us that the appropriations of the last session were bestowed before the least assurance had been given that this new homeopathic law would not share the fate of its predecessors, and in the face of many precedents which would render such a result more than probable?

From the printed minutes of the meeting of the board of regents, held February 17th, 1875, it appears that the committee on the medical department, of which Dr. Rynd is chairman, reported concerning "various papers on the subject of homeopathy, and also a copy of the proposed Senate bill, asking an appropriation of $5,000 for the establishment of such a department, as follows: "We will, if so desired by the legislature, manage the affairs of such homeopathic college, etc." "In this connection we feel it incumbent upon us, however, to suggest, etc." The report was adopted.

If the regent will inform us for whose information the board was thus eager to signify its willingness to comply with the requirements of a bill which had not yet become a law, and that, too, when it contemplated, not a distinct college of homeopathy, but a dependency like the present one, with two professors, the missing link may yet be found, and the unprecedented generosity of the legislature of 1875 be explained. To whom, except the legislature, could they with any force of propriety express their consent to "manage the affairs of such homeopathic college as may be established," or suggest that the overplus of money "should be used for the payment of more professors, or of such other expenses as, in the opinion of the board, may seem necessary?"

Though conscious that my letter is already too long, I cannot forbear a word touching the last annual report of the president of the university.

While it is perhaps too much to expect that President Angell, or any man outside the ranks of the medical profession, should appreciate to the full the principle of professional right and duty—as stable as the everlasting hills of his Green Mountain State—which underlies this controversy, it yet seems strange that such an accomplished scholar and acute observer can believe that our college of homeopathy, as at present established, is as distinct from the medical department as the law department is from that of science, literature and the arts; and adduce the fact that "students who were believers in the homeopathic system of medicine have always been found in our medical classes" as being in any way analogous to the present arrangement. If it can be shown that such students came to the medical college with the avowed purpose of attending all the other lectures, but dropping those on materia medica and practice entirely from their course, then going to a homeopathic college to graduate; and the professor, with this understanding, gave them certificates of proficiency in their several studies, with full knowledge that they would be used as the indispensable means of securing a diploma in such homeopathic college, then will it be proven that these professors had the same responsibility in making them homeopathic doctors as they now have in graduating homeopathic physicians from the university. On no other terms can I see the appropriateness of such comparison.

Very truly yours, C. H. LEWIS.

RESOLUTIONS BY THE JACKSON COUNTY MEDICAL SOCIETY.

At the March meeting of the Jackson County Medical Society, on the 16th, the following resolutions on homeopathy, introduced by Dr. Lewis, were passed without a dissenting voice:

Resolved, That, while we do not deny the right of the State legislature to authorize the establishment of a distinct homeopathic medical college under the auspices of the State university, we deplore and condemn the action of the regents in establishing the present homeopatic dependency on the medical department; and, further,

Resolved, That we do not endorse the present position of the regular medical faculty in relation to this subject, but believe they should have either resigned their chairs or retained them under such a public protest as would have testified their regard for medical ethics, and placed themselves right in the eyes of the profession of the country.

C. H. LEWIS, *Secretary*.

THE MEDICAL PROFESSION INSTRUCTED ON A QUESTION OF PURELY MEDICAL ETHICS, BY MEDICAL STUDENTS.

WHEREAS, At the commencement of the session now drawing to a close serious fears were entertained by many members of this class that the peculiar, and to most of us, before unknown relations of the department of Medicine and Surgery to the Homeopathic College would injuriously affect our interests as students of the department; and

WHEREAS, Our alarm was at first excited, and afterwards aggravated by statements, arguments and insinuations published and circulated among us by unscrupulous and designing persons, and

WHEREAS, By the advice and encouragement of the medical faculty, we were induced to disregard those influences and to remain here, notwithstanding those ominous warnings, and

WHEREAS, We have had all the facts and circumstances of the so called homeopathic complications fully explained to us, and have been able to corroborate the statements of the faculty by a reference to the official records of the department: Therefore, we, as the students, desire, before dispersing to our several homes, to give expression to our honest convictions in the matter; therefore,

Resolved, That we have no reason to regret the determination unanimously adopted by us, after the explanation furnished us in the early part of the session by the faculty, to remain here and avail ourselves of the universally acknowledged high advantages of this medical school. Also

Resolved, That we have carefully considered and investigated the charges and insinuations, which have been so freely urged against our faculty in connection with the homeopathic complications, and we are fully convinced that they are utterly devoid of foundation in fact. Also,

Resolved, That in our opinion, a great deal of the censure which has been expressed towards our teachers in this matter is the result not so much of the hatred of homeopathy (a sentiment which no man or body of men could entertain more strongly than they do), as of a desire, from interested or other motives, to injure and, if possible, destroy this medical school, by depriving it of the confidence and esteem which it has heretofore always enjoyed from the profession as a whole. Also,

Resolved, That we, the students of the department of medicine and surgery, have now as ever, the utmost confidence in the wisdom and integrity of the faculty, as our teachers and the guardians of all our interests as students and intending alumni of this University. Also,

Resolved, That we cordially sympathize with the faculty in the hopes which they now entertain of obtaining from the State Medical Society, at its approaching meeting, such advice and countenance as may result in the adoption of wise measures for the final disposal of this, the only obstacle to the prosperity and usefulness of our Alma Mater.

Resolved, That a copy of these resolutions be sent to the medical journals of Detroit, with a request that they be published.

E. W. YOUNG,
T. J. FORBAN,
HENRY B. HATCH,
J. D. STOCKING,
C. L. DEVINNEY,
Committee.

Condensations from our Exchanges.

PRACTICE OF MEDICINE AND THERAPEUTICS.

GRINDELIA ROBUSTA—ITS MEDICAL VALUE.—Dr. H. M. Fiske (*Pacific Medical Journal*, August, 1875) says that in all cases of iritis he has obtained the happiest results from the use of Grindelia Robusta. It matters not what the cause of the iritis may be—whether gout, rheumatism, scrofula or violence. He gives internally a teaspoonful of the fluid extract every four hours, and externally to the diseased eye a solution of one part to four of water. In asthma he has found its administration of considerable benefit. It controls the distressing nausea and retching attendant upon all stages of cancer of the stomach better than any other remedy he was able to find.

Dr. Jno. E. Cowe (*Louisville Medical News*, February 12th, 1876) reports eleven cases of bronchitis, complicated with asthma, in which the use of Grindelia was followed by the happiest effects.

MERCURY—ITS EFFECTS UPON THE BLOOD OF SYPHILITIC PATIENTS. —Dr. E. L. Kees (*Medical Record*, January 8th, 1875) gives the results of a large number of carefully performed experiments. The blood was taken from twenty-seven individuals, of whom six were sound and twenty syphilitic. The blood was counted 101 times and from five to ten counts made each time. He concludes (1) mercury decreases the number of red cells when given in excess, especially in hospital patients. (2) Syphilis diminishes the number of red cells below the healthy standard. (3) Mercury in small doses continued for a short or long period in syphilis, given alone or with iodide of potassium, increases the number of red blood corpuscles and maintains a high standard of the same. (4) Mercury in small doses acts as a tonic upon healthy animals, increasing their weight. In larger doses it is debilitating or fatal. (5) Mercury in small doses is tonic (for a time at least) for individuals in fair health not syphilitic. In such individuals it increases the number of the red blood corpuscles.

BROMIDE OF LITHIUM.—Dr. Levy (*Bull. Gen. de Therap.—Journal Nerv. and Ment. Diseases*, January, 1876) gives the results of some studies on this salt:

(1) It has no action upon the muscular system, while the bromide of potassium has a distinct influence upon it. (2) Bromide of lithium acts in general, more energetically and more rapidly on the cord and sensory nerves than the bromide of potassium. (3) The loss of sensibility, commencing in the nerves, may propagate itself in a longer or shorter time to the cord or even the brain.

In gout, bromide of lithium has a slight action, but it does not act by diminution of the quantity of uric acid. Bromide of lithium has a marked sedative action on the cerebro-spinal axis. It modifies favorably various neuroses, especially epilepsy. In this respect it is more active than bromide of potassium. Moreover, it does not affect the heart as does bromide of potassium. In gout the dose of bromide of lithium is seven grains. In nervous disorders, as hysteria, insomnia, etc., the dose may be three grains. In epilepsy the dose may be increased to half a drachm.

BROMIDE OF CAMPHOR—ITS THERAPEUTIC VALUE.—M. Pathault (*Gaz. des Hopitaux—Journal Nervous and Mental Diseases*, January, 1876) gives a collection of clinical observations respecting the value of this drug. Great benefit was obtained from its use in cases of chorea, delirium tremens and hysteria in all its phases, hystero-epilepsy, epilepsy, neuralgia, nocturnal pollutions, and various affections of the genito urinary tract. It is best administered in capsules.

BACTERIA—THEIR VARIETIES AND RELATIONSHIPS TO OTHER ANIMALCULES, AND TO SEPTICÆMIA.—Dr. L. A. Stimson (*N. Y. Medical Journal*, August, 1875) in an elaborate review of all facts bearing on the above subject, reaches the following general results:

Bacteria are microscopical vegetable organisms of two main varieties, (*a*) round or oval cells 0.0005 to 0.0010 M. M. diameter, single or arranged in lines or groups, called sphaero-bacteria, micrococcus—(Cohn). (*b.*) Cylindrical cells 0.002 to 0.003 M. M. long, single or arranged in lines (bacteria of all writers). There is no genetic relationship between them and ordinary mould and fungus. They are found in the air, water, and most animal and vegetable tissues. They are saprophytes, not parasites, and are unable in themselves to cause any of the infectious diseases.

Respecting the inquiry "What influence have bacteria upon the origin and development of septic complications of wounds?" his researches give the following answer:

Septicæmia is the name given to an adynamic condition of the organism caused by a certain alteration of the blood. This alteration is not due to a parasitic influence exerted by the rapid growth of cocco-bacteria, because all observations show that this plant is present in the blood of the living animal only in exceptional and rare cases, and then its presence can be proved to be due to local and exceptional causes. Moreover, clinical observation shows that the disease always has its origin in a lesion of the tissues, generally in an open wound, either through inoculation from without or through mechanical or chemical irritation of the parts; but coccobacteria are often entirely absent from these starting points of disease, and are often present in the pus and secretions of wounds and abscesses without exciting septicæmia.

Inoculations which will cause septicæmia may be made with materials coming from the acute special inflammations mentioned, or from putrefying animal liquids and infusions. Cocco-bacteria are almost always present in these liquids, but they may be removed and yet the virulence of the liquid will still be preserved.

Cocco-bacteria having thus been eliminated, what remains? Only the products of putrefaction in one case and those of inflammation in the other. There is then produced in the secretions of these wounds or in the adjoining tissues, a certain product of inflammation which resembles, if it is not identical with the poisonous principle of the products of putrefaction.

It is highly probable that this virulent substance can be taken up by vegetable forms, which may then serve as carriers of contagion, and that it is very favorable to their rapid multiplication, by which it is itself in turn very much increased in amount.

PHYSIOLOGY.

Meconium—Its Composition.—Zweifel (*Archiv. für. Gynæcologie—London Medical Record*, December 15th, 1875) gives the results of a careful examination of [the meconium of still-born children. Hæmatoidin and bilirubin crystals were detected by the microscope. Chemical analysis discovered in addition to the above, the presence of biliverdin—the bile acids, cholesterin, mucin, traces of formic acid, and the higher volatile fatty acids and non-volatile fatty acids. The quantity of water in meconium was almost eighty per cent.—the ash about one per cent. The fat in fresh meconium was 0.772, and the cholesterin 0.797 per cent. The composition per cent is, insoluble substances, 2.1; phosphate of iron, 3.41; sulphuric acid 23.0; chlorine, 2.53; phosphoric acid, 5.44; lime, 5.7; magnesia, 41.0; potash, 8.6; soda, 41.0. As compared with the excreta of adults the high percentage of sulphuric acid, and diminution of phosphoric acid is noticeable.

Functions of the Brain in very Young Animals.—Dr. Utto Soltmann (*Jahrb. f. Kinderheilk—Journal Nervous and Mental Diseases*, January, 1876) gives the results of an extended investigation of the above subject.

(1) No muscular movements were produced by the electrical irritation of the cerebral cortex in newly born animals.

(2) They were first observed in puppies about the tenth day after birth. They appeared in the following order: First, motions of the opposite anterior extremity; second, that of the opposite posterior one; and third, the facial (optic) muscles.

(3) The circumference of the cortical motor centres is greater in very young animals than in older ones. As the number of the motor centres increases they become more narrowly defined and correspond to those fixed by Hitzig.

(4) The extirpation of the cortex of the anterior lobe causes no motor disturbance in new-born and ten-days old puppies, neither at the time or later. The extirpation of the anterior lobe in older animals is accompanied with a paralysis of the muscular sense, the more pronounced the older the animal.

(5) The extirpation of the cortical portion of both anterior lobes produces in new-born animals, neither at the time nor later, any motor dis-

order. The extirpation of the same in adult dogs, is accompanied by bilateral ataxia.

(6) The corpus striatum has no motor function in the new born.

(7) Contraction in the opposite anterior member is produced in new-born puppies by electrical irritation of the fibres of the internal capsule. The exact locality from which this result is produced varies according to the age and the individual; it is sometimes more superficial than at others. It is most certainly produced by irritation of that part of the fibres of the internal capsules which lie between the corpus striatum and the optic thalamus, whence they pass out to enter the white substance of the hemispheres. The irritation in no case causes movements of the opposite posterior member or of other muscles.

The fact that no motor centres exist in the new-born animals shows that the nervous phenomena at that age are altogether spinal and reflex in their nature. Hence, in children, there is a lack of the inhibitory influence of the higher centres upon the actions of the spinal cord. The same fact accounts for the teachings of experience that many brain diseases may be latent without characteristic symptoms at that period.

DEJECTIONS OF HEALTHY INFANTS—Wegscheider (*London Medical Record*, January 15, 1876) gives us the result of a chemical and microscopical examination of the dejections of heathy infants, nourished exclusively at the breast.

(1) Albuminous substances derived from the milk are completely absorbed.

(2) The so-called "milk detritus" consists essentially of fat associated probably with remains of intestinal epithelium. It is not undigested casein.

(3) The absorption of fats is by no means so complete as that of albuminous substances. A part leaves the intestine certainly as soap, another part as free fatty acids, and perhaps a third part as unchanged fat.

(4) Even during the first weeks of extra-uterine life some of the biliary coloring matter is reduced in the intestine and eliminated by dejections, as hydro-bilirubun. Some unchanged coloring matter is, however, always present. Later, its conversion appears to be complete. In slight derangements of the intestine, the presence of biliverdin was unmistakably recognized, produced perhaps by the greater acidity of the accompanying fæcal matter.

(5) The proportions of cholesterin correspond completely to those which have been found in adults and in the fœtus.

(6) Of the intestinal ferments only the diastatic and the fibrin-digesting ferment of the pancreas were found.

LYMPHATIC SYSTEM OF THE LUNGS—ITS THREEFOLD DISTRIBUTION.—Dr. E. Klein (*London Medical Record*) gives to the radicles of the pulmonary lymphatic system the following threefold distribution :

(1) Over the walls of the alveoli. This system is represented by irregular lacunæ and anastomosing canals, giving origin to lymphatic vessels having a special epithelial wall. These, as regards their position according as it is superficial or deep may be classed as *sub-pleural* or *perivascular* lymphatics.

(2) Over the walls of the bronchi. This system consists in the mucous membrane of irregular lacunæ and anastomosing canals in the more external parts, *i. e.*, in the adventitia of smaller or larger spaces. From these originate vessels having a special epithelial wall and forming in the adventitia of the bronchi a net work—the *peribronchial* lymphatics.

(3.) Over the pulmonary plura. This is a system of interfascicular lacunæ communicating by a few canals. In the lung of the guinea-pig there are in addition certain *intermuscular lymph spaces.* Both discharge into the sub-pleural lymphatics. The sub-pleural lymphatics communicate directly with the pleural cavity by means of *stomata.* By means of *pseudo-stomata* the radicles of both the perivascular and peribronchial lymphatics communicate indirectly with the alveolar cavities on the surface of the bronchial mucous membrane.

OBSTETRICS.

Normal Ovariotomy.—This operation has been performed three times—first, several years ago by Dr. Robert Battey, of Georgia; then by Dr. T. G. Thomas, in New York, and lastly, by Dr. T. T. Sabine, of New York. In each case, the call for the operation was on account of a terrible ovarian pain, which no other means could alleviate, and which was slowly killing the patient. Each was successful both as regards the operation and obtaining the sought for relief.

Nitric Acid—Its Value in Treating Diseases of Cervix Uteri.—Dr. E. J. Tilt (*British Medical Journal*, December 4, 1875) says that his observations in the effects of the above use of nitric acid lead him to the belief that

(1) In comparatively recent cases of endo-cervicitis, nitrate of silver, tincture of iodine or carbolic acid suffices.

(2) That chronic cases of endo-cervicitis had best be treated by acid nitrate of mercury or nitric acid.

(3) Hyperchronic endo-cervicitis, with considerable cervical hypertrophy, requires potassa fusa cum calce or some strong acid.

Dr. Braithwaite and Dr. F. Churchill of Dublin, advise nitric acid in all cases of cervical disease requiring a caustic.

Parametritis and Peri-Metritis.—Schroeder (*Diseases Female Sexual Organs*, page 45) says that parametritis is a connective tissue phlegmon, which is due to an infection with septic material; hence, that it is common in the puerperal state, but at other times is tolerably rare, and that perimetritis is a partial peritonitis, which may be and frequently is induced by the most diverse causes.

Mammary Abscess—Its Treatment.—At Bellevue Hospital (*Medical Record*, August 7, 1875) compression with a sponge is regarded as the most satisfactory method of treating a mammary abscess after the pus has been thoroughly evacuated. The details of the plan are essentially as follows: A coarse sponge is selected large enough to cover the breast and about four inches thick. It is made a trifle concave on one side—is thoroughly cleansed in boiling water—the particles of sand being carefully removed, and while wet is placed between two pieces of board, and subjected to at least fifty pounds pressure. At the end of twenty-four hours it will be dry and ready for use. To use, first cover the breast with a moderately thick layer of oakum. Before applying the sponge the breast is raised and supported while the sponge is retained by the appropriate bandage. The upper end of the sponge is left uncovered so that it can be easily wet. The dressing need not be removed for two or three days, and then another should be immediately applied; so that the dressing be continued for ten days.

Chronic Uterine Affections—their Local and Constitutional Treatment Compared.—Dr. C. D. Palmer (*Clinic*, October 2, 1875) concludes an article on the subject with the following propositions: Chronic uterine disease and constitutional derangement usually coexist, on which account a cure can rarely be secured by either alone. A removal of the local trouble by exclusively local means, can be obtained only before the general health is involved. A local treatment, no matter how well directed, unassociated with general management, while temporarily beneficial, will uniformly be found to be unsuccessful in accomplishing a complete and permanent cure. Local improvement can generally only be commensurate with the general. This is especially true in all cases of intra-corporeal forms of endo-metritis, wherein some serious constitutional dyscrasia lies at the root of the evil.

Constitutional treatment is of importance, not simply for the healthy modification of disorders of especial functions associated with general ill health, but for the direct influence which general medication has upon the local organs involved. A large proportion of all chronic uterine affections being dependent upon constitutional conditions, it follows that constitutional treatment is of first and paramount value.

PESSARIES—THEIR LONG RETENTION IN VAGINA.—At a meeting of the London Obstetric Society, Dr. Garvis (*London Obstetrical Journal*, November, 1875) reports a case in which he removed a large, round, metallic pessary from the vagina of a woman, aged fifty-six. It had been introduced fifteen years previous to relieve prolapse of uterus. Four years before its removal she began to feel a weakness in the lower back; two years after her legs became weak and she was unable to walk without assistance. During the last six months she had been nearly bed-ridden, and had had an offensive bloody discharge from the vagina. On removal of pessary all paralytic symptoms disappeared.

Dr. Edis reported a case in which a large oval pessary, the size of a goose egg, had been left in vagina for eleven years.

Dr. Rogers reported a case in which a black box-wood pessary had been left in eighteen years.

Dr. Bantock reported a similar case.

PUERPERAL FEVER—REASONS FOR REGARDING IT A ZYMOTIC DISEASE. Dr. Putzel (*American Journal Obstetrics*, August, 1875) gives the following as reasons for adhering to the zymotic origin of puerperal fever:

(1) Puerperal fever is infectious and contagious; septicæmia is not. Septicæmia has never been known to track the practice of a physician in a country district. The number of authentic examples on record in which an obstetrician has conveyed the poison of puerperal fever from one patient to others is almost innumerable.

(2) It is a curious and instructive fact that while one epidemic may be characterized by a certain lesion—such as uterine phlebitis—another may be especially marked by the existence of pulmonary affections, or perhaps lesions of the brain. Again, in the beginning of an epidemic, a certain complication may be prevalent, but towards the close of the same epidemic a different co-existing affection may predominate. Such facts accord with the view of its zymotic character.

(3) Careful post-mortem examinations have shown that peritonitis is sometimes produced when the uterus, uterine sinuses and lymphatics and pelvic fascia are normal. The facts thus obtained tend to establish the existence of a specific poison in the blood, contaminating the whole system, and rendering each organ liable to serious derangement to its nutritive processes.

(4) A patient may be attacked with puerperal fever before labor has begun, even though the fœtus was healthy and no avenue existed for the introduction of septic material.

(5) During an epidemic of puerperal fever, gynecological operations are very likely to be attended by subsequent inflammation.

(6) The clinical history of peurperal fever is different from that of septicæmia.

SURGERY.

PUNCTURING THE MASTOID CELLS.—Dr. Creveling (*New York Medical Journal*, May) recommends an ordinary trochar for puncturing the mastoid cells. The following advantages are claimed over the gimlet or trephine:

1. There is less danger of injuring the internal table—an occurrence of no little importance to the operator or patient.
2. It is much more manageable than either a trephine or gimlet.
3. The operation is performed in less time.
4. It is the only instrument required, the cutting edges of the trochar dividing the soft parts sufficiently for the escape of the contained fluid.

BRYANT'S TEST LINE—ITS DIAGNOSTIC VALUE IN CASES OF INJURY OF HIP JOINT.—Dr. Thos. Bryant (*London Lancet*) says that for three years he has derived great benefit from the use of this line in the above class of cases. To obtain the line the patient is placed on a firm bed with his pelvis brought to a right angle with the spine, and his lower extremities slightly extended. A tape is now permitted to fall from the anterior superior spinous process of the ilium of one side to the horizontal plane of the body. A second tape measures the shorter distance from this vertical tape to the upper border of the great trochanter on the same side. Similar measurements are taken on the opposite side. The horizontal lines are compared, and if exactly alike, there is probably no lesion. At the hip joint, a shortening of the test line indicates a direct injury to the hip.

HIP DISEASE—ITS TREATMENT.—Mr. Annandale (*Edinburgh Med. Jour.*, *Dec.*, 1875) gives the following summary of the views on this subject:

1. When suppuration and disorganization of the textures of the hip joint continue unrelieved by ordinary treatment, excision of the head of the femur is a proper and justifiable proceeding, if the patient's health is in a fair condition.
2. The operation is more successful in children than in adults.
3. In successful cases of the operation, the results, as regards the usefulness of the limb and joint, are superior to those which follow a natural cure.
4. Superficial or limited acetabular disease does not interfere with the performance and good result of excision of the head of the femur.
5. Even when the acetabulum is much involved, or pelvic suppuration exists, it is important to afford a free escape to the pus by the removal of the head, neck and great trochanter of the femur.
6. When the acetabulum is extensively diseased, it, together with the head and neck of the femur, should be removed, if the patient's condition admits of the operation.
7. It has not yet been accurately decided what is the earliest stage of the disease in which the operation is justifiable, although most agree that hitherto the operation has on the whole been delayed too long.

CHLORAL.—ITS VALUE AS AN ANÆSTHETIC IN INFANTS.—Bouchert, (Bull. Gin. de Thir.—*Lond Med. Record*, *Jan.* 15, 1870) says that anæsthetic doses of chloral are readily taken by infants. He has frequently employed it in chorea, cerebral rheumatism, opening abscesses, and tooth-drawing. Out of ten thousand cases he never has had a fatal accident. He has given it up to ninety grains daily, in the same subject continued for a month, so that some 3,000 grains have been absorbed. A dose of from forty-five to sixty grains, administered at once by the stomach, produced sleep and absolute insensibility. Anæsthesia begins a quarter of an hour after the ingestion of a full dose, and is completed at the end of an hour. The infant groans and moves without waking during the operation, and then falls again into a passive condition.

Editorial.

Seeking to be the medium through which the members of the medical profession may communicate with each other on *medical subjects*, we solicit Original Articles, Reports of Medical Societies, Observations, Correspondence, News, etc., of general interest. Articles should be practical and carefully prepared.

Secretaries of Medical Societies are respectfully requested to send us Reports for publication.

Each of our professional readers is personally invited to forward us Original Articles, Reports of Cases, Medical News, etc.

The Editors will not be responsible for statements made over the names of contributors.

NOTICE TO SUBSCRIBERS.—This Journal is conducted on a strictly cash basis. Each subscriber will receive a printed notice of the expiration of his subscription, and unless prepayment for next year be made within a reasonable time, his name will be dropped from our mail list.

THE NON-MEDICAL PRESS AS THE ALMA MATER OF MODERN CHARLATANISM.

CONCERNING the general importance of the non-medical press, we have no doubt, as a collector and disseminator of intelligence—vast and varied —as the field upon which bloody battles are fought—in everything that pertains to individual, social or political life—as in these and countless other ways it ministers to our comfort, growth and development, it receives our warmest admiration. But, as in all things human, the press has its attendant evils. One of them is its relation to medical matters. Its mistake has been and is largely due to its assumption that in these things it is, without the proper technical knowledge, competent to judge in purely medical matters, and that medical men are subject to the dictations of ordinary commercial usage. On these false assumptions the press has usually dealt with things medical as with things commercial. The evils arising in this way to the profession and the people are not limited to any race or land. Thus a French medical writer says, "The non-professional press is in all civilized countries the *alma mater* of modern charlatanism."

Few thoughtful, scientific physicians will regard this as an exaggerated statement. The ignorant egotism of the press which estimates the science and art of medicine from a purely commercial basis vigorously develops its interest in that direction. Hence it comes to pass that the non-medical press, secular and religious, with few exceptions, draws a princely income from its ignoble, degrading service to charlatans. For money, the press —by advertisement or editorial puffs—defiles the purest homes with outrageous lies by the patent medicine man—the infamous proposals of the abortionists—the utterly false insinuations of the panderers to masturbation and adultery, etc. Blacklegs and murderers—villains of all sizes and colors—are thus daily, by the agency of the press, placed in companionship with the purest and best men, women and children. The worst of the matter results from the fact that—through ignorance respecting such things—many are not aware of the vileness of such advertisements and puffs until irreparable damage be done. The full scope of this cause of disease and crime it is impossible to estimate, but isolated portions fall too frequently under the eye of every observing physician. Preventative medicine will have won a glorious triumph in that day when the entire press excludes from its columns all that which pertains to charlatanism.

Again, in the medical profession, as among men in general, there are some who nominally desire to rank with the regular medical profession, and at the same time use as far as possible all the tricks of charlatans. Such manage to get their names in the papers in connection with marvellous cures or extraordinary successful operations as often as possible. By these and other methods they seek to inform the people through the press, that they, above their brethren, have the skill and knowledge needed for the cure of particular diseases. In those cases the fault probably lies more with the doctor than the press. Still the press encourages such a course, believing it eminently proper for the doctor to advertise in the same manner as the variety theatre. Hence it must be held responsible for encouraging this species of charlatanism.

What means can be taken to convert the secular press from the error of its ways? Many answers have been given to this question—but none have practically solved the problem. Clearly the radical remedy consists in the proper education of editors and managers of the press respecting these things. Those influenced solely by the love of money no education will touch. We have faith to believe that the number of such publications is relatively small. Several influential papers openly refuse all advertisements pertaining to medicines, doctors, etc., and vigorously expose quacks and quackery. To encourage these in this matter and to endeavor to increase their number is the duty of every physician and lover of his race.

Concerning the other class of charlatans, the morally weak, who endeavor to serve both the devil and the profession, a vigorous effort is being made to compel them to "choose whom they will serve." If the profession is chosen, then they must abide by the plain teachings of our ethical relations. It would be a great gain to have the press and people clearly understand that every man whose name with Dr. or M. D. attached to it appears in the non-medical papers, in connection with surgical operations, or remedies, or cures, etc., is a quack—unscrupulous and utterly unworthy of confidence.

Certainly the non-medical press *could* do more than any other power to wipe out charlatanism if it was *properly educated.* Until thus educated, it will in the future, as in the past, be the "*alma mater*" of charlatanism.

The annual commencement of Detroit Medical College took place Tuesday evening, February 29th. The number of graduates was twenty-nine. Addresses were given by Rev. Arthur T. Pierson, D. D., and Prof. R. C. Kedzie, M. D. Number of matriculates during the year just closed is ninety. A considerable number are pursuing the three years' course of instruction furnished by the college. This course includes a collegiate drill of ten months. Students are examined at the close of each yearly term upon the studies of this term, and if satisfactory this examination is final. The college furnishes every inducement possible for all students to pursue this course. It hopes to receive such encouragment from the profession as to enable it to make it obligatory for all students.

The commencement exercises proper were preceded by a meeting of the alumni of the college. An interesting address was delivered by the retiring President, Dr. C. C. Yemans, of Detroit. Among the officers elected for the ensuing year were: Dr. David Inglis, President, and Dr. Charles F. Hertzog, Vice-President. Graduates of the college, or others desiring a full account of this meeting and of the commencement exercises, can obtain it by writing to either the President or Secretary of the Alumni Association. The post-office address of both of these gentlemen is Detroit, Michigan.

MEMORANDA.

Time has developed the fact that clinical teaching is an absolute necessity in all medical schools.

Mr. A. Kuhlman, surgical instrument maker, in Detroit, has removed his place of business to 210 Jefferson avenue.

The College of Physicians (Philadelphia) has now in its library about nineteen thousand books. Eleven hundred were added during 1875.

Another glaring evil is the fusion of regular and irregular medical colleges, as at Michigan University.—*Southern Medical Record, February*, 1876.

The tenth annual meeting of the Michigan State Medical Society will be held at Ann Arbor, commencing on Wednesday, May 10th, 1876, at 10 o'clock A. M.

The late Prof. Lewis Rogers, when in Paris, asked Piorri how Austin Flint was regarded in France. "Austing Flin," said Piorri, "what is dat?"—*Louisville News.*

Sir Astley Cooper's receipts for the first year of his practice was £5 5s, for the second £26, the third £54, the fourth £96, the fifth £100, the sixth £200, the seventh £400, the eighth £610, the ninth £1,100.

On all scientific themes the average human testimony is worth nothing except to illustrate human ignorance.—*Beard.* Only those who have especially studied any particular topic are worthy of credence.

To Cullen we are largely indebted for the introduction into general use by medical men of such remedies as the acid tartrate of potash, tartar emetic, hyosciamus and the pulvis antimonalis.—*Bigbie—British Medical Journal.*

Rudolph Virchow is poor, lives on the second flight, and complains that he cannot live as a gentleman of his standing should.—*Boston Medical Journal.* Scientifically and politically he is one of the most conspicuous men of the day in Germany.

The proprietors of the *United States Medical Directory* propose to issue a revised edition of said work. All physicians who have begun practice during the past three years, or changed location, etc., are desired to report the same to 115 South Seventh street, Philadelphia, Pa.

According to provisions in his will, Von Græfe's immense eye clinique was abandoned at his death. An ordinary liquor shop now occupies its site. Five other eye cliniques have sprung up in sight of this shop, and are conducted by assistants of the famous oculist.—*Correspondence Boston Medical Journal.*

The late Dr. Jno. D. Jackson was so faithful in his duties as a preceptor that any young student who left his office, *with his consent*, to attend lectures, had naught to fear from an examination. He said of a favorite pupil, "Doctor, I defy you to ask L—— a question in anatomy that he cannot answer."

The New Orleans Medical Association strictly enforces that article of its constitution which summarily dissolves the membership for non-attendance without sufficient excuse on three consecutive meetings. Thus it casts drones out of its membership, and teaches each that he owes the society a positive definite duty.

Dr. Bartholow, *The Clinic*, March 11th, 1876, says: "In Columbus there are two medical colleges, in Cleveland three, in Indianapolis two, in Louisville five, in Evansville one. These provincial schools are for the most part poorly provided with the means of instruction. They have no hospital facilities worthy of the name—their faculties dole out dull didactic discourses from ordinary text books."

Graduates from American Medical Colleges:

Ohio Medical College	90
Louisville Medical College	86
Medical Department University of Louisville	112
Washington University School of Medicine	32
Bellevue Hospital Medical College	159
Medical Department University of New York	133
College of Physicians and Surgeons, New York	93
Rush Medical College	79
Cincinnati College of Medicine and Surgery	27
Jefferson Medical College	141
Medical Department University of Pennsylvania	124
Evansville Medical College	8
Indiana Medical College	32
University of Nashville and Vanderbilt University	64

In an editorial article (*Boston Medical Journal*, February 24th, 1876), attention is called to the "ignominious failure of the Michigan State Medical Society to bring about a discussion on the relations of the homeopathic branch of the medical school of Michigan University to the other branch and to the profession of the State. This inaction the faculty claim to be a practical endorsement of the course they have thought best to adopt. As the matter is of general interest to physicians throughout the country, the writer believes that it will receive the attention of the American Medical Association at its next meeting. He regrets that the discussion of this question by the society has been postponed until the eleventh hour, and that it will then be held under the disturbing influences of an election involving other and opposing interests. He hopes "that the general spirit of reform now manifesting itself in the profession will exercise a wholesome influence at this meeting, and a desire to act in behalf of the good name and welfare of medicine, paramount to all other interests." He reminds the "members of the Michigan Medical Society that the question which they will be called upon to discuss, is not whether it is 'a liberal policy' for the faculty of the university to tolerate the presence of 'practitioners of a different belief,' but whether they shall associate themselves with charlatans without rebuke." He adds "however indifferent American physician may have been to standards of education and some other questions, there is one point upon which they have always held a pretty general and decided opinion, and we feel quite sure that 'irregularities' of this kind will not be allowed to pass unnoticed."

Book Notices.

MEDICAL THERMOMETRY AND HUMAN TEMPERATURE. By E. Sequin, M. D. Cloth. Pp. 450. 1876. New York: Wm. Wood & Co. For sale by E. B. Smith & Co., Detroit.

There are two distinct parts to this book. The first treats of human temperature—its variations from birth to old age—as modified by sex, food, drink, activity, etc., etc.—the alterations produced by disease, whether general or local—the temperatures characteristic of special disease, or groups of diseases, etc. The second part treats of the methods for ascertaining and accurately recording variations in human temperature—the methods of modifying temperature by medicines proper, or by food or drink. This part closes with chapters on the importance of the thermometer in the school, family, etc., as a means of correct living, of recognizing the first departures from health, and of aiding the physician in the prophylaxis and cure of positive disease. We have space only to notice a few points in this interesting work.

The salient phases in the history of human temperature are: (1) the Hippocratic, in which physicians have no other guide than their sense of touch and the sensations of their patients; (2) that of Sanctorius, opening with the invention of the thermometer; (3) that of DeHaen, or the practical application of the thermometer to the clinic; (4) that of Becquerel, or the foundation of the NORME base of the numeration in mathematical diagnosis; (5) that of Wunderlich, or the first demonstration of the *laws of ustion* in diseases; (6) that in which uniformized thermometry will be the center of a *positive method* of observation applicable not only to physic, but to insurance, labor, training, education, and the most rapid and direct improvement of our race.

The normal temperature is placed at 98.6 degrees Fahrenheit, but aside from unhealthy variations there are normal oscillations during the day averaging 0.9 degrees Fahrenheit—more or less in different persons. The exact laws of these oscillations have not been established. This will not be done until physicians have instructed their patients respecting the importance of knowing their own normal temperature, normal circulation and respiration. It is suspected that the seasons, atmospheres and sidereal conditions may have an action on the human temperature.

We think that too much emphasis cannot be placed upon his conclusions as to the reciprocal duties of physicians and their patients in this regard. He says physicians should take all the normal temperatures they can, and that every man and family should keep a record of the temperature, circulation and respiration. This record would be invaluable in foreseeing, judging and curing all possible anomalies of health. Concerning infantile temperatures, he remarks that the great difficulty in their study is their want of regularity. Even crying will cause a rise of temperature ; sleep or no sleep acts on the same functions—a light one cools, a protracted one frigerates ; the want of it increases the heat, its long privation brings on algidity; wakefulness in the evening considerably lowers, and sleep harmonizes their temperature, but protracted it lowers the three great vital functions. A depression of temperature in infancy is of more immediate practical significance than the slighter elevations, since it points at once to the want of a better nutrition. As food is the main source of heat, a regular supply of wholesome food is essential to an equality of temperature.

In well children food or warm drink or cold bathing will sooner heat the surface than increase the central temperature. When the circulation is feeble and there is fatigue and chilliness, warm food and bath raise both internal and external temperatures ; almost two degrees may be gained by this double method of applying heat.

In the chapter on the causes influencing the variation of temperature of the adult, it is shown that overwork is a potent source of disease. The overworked state is defined as that in which rest and re-invigoration do not follow sleep, food and the other usual restorative processes. At this stage of lowered temperature man falls a prey to any cause of enfeeblement and extinction. Gavarret demonstrates that if the working man spend more heat than his heating apparatus, wholesome food, pure air, etc., can furnish, sooner or later his central temperature will descend below the norme, and he will be left without reaction against any new cause of drainage of caloric.

Not only the overworked man has his own normal temperature displaced, but the diseases of his family will all bear the stamp of apyrexy, and anæmia, sclerema, thrush, croup, cholera infantum, etc. The heir of the sick, if spared the virus of vice, will have a more even temperature from the center to the periphery, from youth to old age, while the new crops of overworked humanity will be shorter lived, shorter sized, deformed like the counts of Lyons, and show in their discolored skin the inheritance of a low peripheric circulation and temperature.

Morally, the keeping of the normal temperature, etc., is the reward of an honest, independent, useful life, during which the fluctuations of temperature in health are but slight; if they rise quickly, they go down quickly. A great increase of heat is accompanied by a larger loss; a small production of heat is balanced by a slight loss.

A single thermometric observation has a variable value. The absolute height of a given temperature, without its antecedents, can mislead in diagnosis and prognosis. Thus isolated, the highest only portends danger, with this limitation: higher temperatures are borne in typhus and typhoid fever than in pneumonia, in scarlet fever than in measles, in relapsing fever than any other—thus 107.6 degrees being almost free from peril. The case of Mr. Teale is quoted, in which the temperature rose to 122 degrees Fahrenheit. In all cases, repeated observations must be taken before forming hasty conclusions from the first. The regular course of the temperature during various diseases is clearly and fully given in so far as there are definite data. Of surgical temperatures, Rodard says: (1) Wounded, whose temperature is below 96 degrees, must not be operated on, since they will certainly die. (2) Wounded who will not inside of four hours give signs of reaction commensurable to their *traumatic fall* of temperature must be considered as seriously affected.

As to the times for taking the temperature, generally it is enough to take it twice a day, from 7 to 9 A. M., time of the lowest temperature; and from 4 to 6 P. M., time of the highest, unless these daily remissions and exacerbations are displaced.

The subject matter of this volume is of the highest importance, and the profession is under great obligations to its author for the zeal he has manifested in bringing it to our notice. Incidentally we may remark that its obscure and rather pedantic style will prove an obstacle to some, as it certainly increases the labor of intelligently reading it. The centigrade scale is used throughout, and generally the Fahrenheit equivalent added. This will aid readers in becoming familiar with the new system of scales. The book is worthy of careful study by every medical student and studious practitioner.

INHALATION IN THE TREATMENT OF DISEASE—ITS THERAPEUTICS AND PRACTICE. By J. Solis Cohen, M. D. Second Edition. Cloth. Pp. 391. 1876. Philadelphia: Lindsay & Blakiston.

This little book contains an excellent account of our positive knowledge respecting the inhalation of gases, vapors, fumes, compressed and rarefied air, nebulized fluids and powders. In his historical account of the subject, Dr. Cohen shows how the method has again and again been resorted to, and again fallen into disuse, and perhaps abuse. Here, as elsewhere, history has been ever repeating itself. One reason why physicians have oftener resorted to this method is that they have been unwilling or unable to give that personal attention necessary to secure proper inhalation. It is easier to give a pill, powder or draught.

Among the advantages of the method, he mentions: (1) the fact that medicines are thus presented in a "simple medicinal form;" (2) the misfortunes and errors of the elaborate prescriptions of the polypharmacists are less apt to be endured by the patient; (3) the mucous membrane of the respiratory organs has a far greater capacity for absorption than that of the stomach; (4) the medicine is not exposed to the action of the gastric juice; (5) it is less likely to disturb the digestive functions; (6) the inhaled material comes directly in close juxtaposition to the blood while in its most vital state, and is thus more promptly and more thoroughly absorbed into the tide of the circulation than when it traverses part of the venous circuit before exposure to the inspiratory effort.

Concerning the proper method of inhaling vapors, etc., the following directions are given: "If the smoke, after having been taken into the mouth, be blown into a wide-mouthed vessel, a tumbler for example, and a deep inspiration be made of the smoke as it is playing about in the receptacle, the lungs will become charged under subjective phenomena, promptly perceptible to the patient. When, therefore, vapor has been drawn into the mouth from an inhaler, a deep inspiration should follow the suction effort, so that the air in entering the lungs will carry a portion of the vapor with it. If this cannot be done, the vapor or smoke may be blown into a tumbler and inhaled from that. If the vapor is forced into the mouth mechanically by compressed air, from a compression bellows for instance, it can be inhaled much more readily than by the mere effort of aspiration. This method is of advantage in administering inhalations to debilitated or bed-ridden patients."

Attention is directed to a great mistake often made in administering vapors. The water is often too hot; usually a temperature of from 110 to

120 degrees Fahrenheit is all that is required—the more volatile substances require even less heat.

The various forms of inhalers are carefully described: "Systematic inhalation of atmospheric air is often of great therapeutic service." By this is meant the habitual employment of a number of forced respirations of fresh air at stated intervals. Cohen says: "I have for a long time, in suitable cases of deficient aeration of the lungs and expansion of the chest, been in the habit of advising the daily use of the jumping rope a few minutes at a time, 'back doors,' as the children term it. In young ladies, especially those of sedentary habits or occupations, or those kept too closely confined at school or at the piano, I have found this exercise of admirable utility in promoting due expansion of the lungs and development of the chest, as well as overcoming a disposition to round the shoulders. As a matter of course corsets and every other bandage or article of apparel which constricts the chest or abdomen should be removed during the exercise." "Forced inspiration and expiration of common air often terminates a paroxysm of spasmodic asthma."

Waldenburg's apparatus for inhaling compressed or rarefied air is clearly described. After already giving in some detail the effects of breathing compressed or rarefied air, he says that the inspiration of compressed air is indicated in dyspnœa of almost every origin, in the chronic stages of pleurisy and emphysema, in atelectasis, in certain conditions of consumption, in bronchitis, asthma, emphysema, inflammatory stenosis of the air passages, asphyxia, insufficiency of the mitral valve, and stenosis and insufficiency of the aortic valves. Expiration into rarefied air is chiefly indicated in emphysema and bronchitis. Inspiration of rarefied air is indicated in cases of contracted thorax, as in predisposition to phthisis and its earlier stages and in convalescence after pleurisy. Expiration into compressed air is indicated in cases of deficient normal expiration as a means of strengthening the expiratory muscles.

Concerning the effect on the paroxysms of whooping cough of the inhalation of various kinds of air, Cohen shows that ammoniacal vapor, or carbonic acid, increases these, while pure oxygen, or equal parts of oxygen and air, did not produce a single paroxysm. Hence whooping cough patients free from fever are advised to be out in the open air as much as possible on still, sunny summer days. Their diet should be one rich in fatty constituents, such as milk, sugar and starches. Impregnating the air of the rooms in which the patient lives with the vapor of benzine greatly increases the number and violence of the paroxysms.

We have not space to notice further this admirable little work. All who desire to utilize inhalation in treating disease will be wise to carefully study in detail the special facts and views here presented.

For sale by E. B. Smith & Co., Detroit. Price, $3.75.

BOOKS RECEIVED.

DISEASES OF CHILDREN—Third Edition—Smith.

SYSTEM OF MIDWIFERY—Second Edition—Leishman.

EXTRA-UTERINE PREGNANCY—Parry.

SURGERY; ITS PRINCIPLES AND PRACTICE—Holmes.

MEDICAL JURISPRUDENCE AND INSANITY—Brown.

MANUAL OF GENERAL PATHOLOGY—Wagner.

DR. DOBELL'S REPORTS ON DISEASES OF THE CHEST.

INSANITY IN ITS MEDICO-LEGAL RELATIONS—Cowperwait.

BANDAGING—Leonard.

TRANSACTIONS OF THE OHIO STATE MEDICAL SOCIETY FOR 1875.

STATISTICS OF BIRTHS, MARRIAGES AND DEATHS IN THE CITY OF PHILADELPHIA FOR 1874.

CIRCULARS OF INFORMATION OF THE BUREAU OF EDUCATION—1875.

CONTRIBUTION TO THE STUDY OF POST-NASAL CATARRH—Beverly Robinson, M. D.

REPORT OF THE HEALTH OFFICER OF THE CITY OF OAKLAND FOR 1875.

GENERAL PRINCIPLES OF MEDICAL CLIMATOLOGY—Sir Alex. Taylor, K. B., M. D., F. R. S. E.

TRANSACTIONS OF THE AMERICAN OPHTHALMOLOGICAL SOCIETY—1875.

DR. LENOX HODGE'S NOTE BOOK FOR CASES OF OVARIAN TUMORS AND OTHER ABDOMINAL ENLARGEMENTS.

BIOGRAPHICAL SKETCH OF JNO. D. JACKSON, M. D.—By J. M. Toner, M. D., and L. E. McMurtry, M. D.

PROCEEDINGS OF THE AMERICAN PHARMACEUTICAL ASSOCIATION, 1875.

Also, the following reprints from various medical journals:

Medico-Legal Evidence of Independent Life in a New-born Child—By Dr. J. B. Gaston.

Description of a new Battery for Galvano-Caustic Surgery—By B. F. Dawson, M. D.

Dangers of the Transmission of Syphilis between Nursing Children and Nurses in Infant Asylums and in Private Practice—By Dr. R. W. Taylor.

A rare form of Idiopathy localized, or Partial Atrophy of the Skin—By Dr. R. W. Taylor.

Biometry; Its Relations to the Practice of Medicine—By Dr. M. Morris.

The Treatment of the Scrofulides—By Dr. H. G. Piffard.

Veratrum an Antidote to Opium—By Dr. J. S. Todd.

Compulsory Vaccination—By Dr. E. L. Griffin.

Tinnitus Aurium—By Dr. L. Turnbull.

Clinical Contribution to Ophthalmology—By Dr. C. R. Agnew.

Intra Uterine Polypi—By Dr. A. R. Jackson.

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Original Communications.

PHYSIOLOGY OF DIURETICS.

By T. Curtis Smith, M. D., Middleport, Ohio. Read before the Meigs and Mason Academy of Medicine, and ordered to be published.

THE urine is an excretion of water containing more or less solid material in solution, which results from disassimilation, and which the kidneys by their selective affinity are enabled to separate from the blood. Its normal specific gravity is 1.018 to 1.020. A little variation from this frequently occurs without any evidence of ill health.

The chief function of the kidney seems to be to remove from the circulation any excess of water, and more particularly urea, which is a crystallizable nitrogenized constituent of the blood, which results from the disassimilative process constantly going on in the system. Urea is always present in normal urine to the amount of 15 to 23 parts per thousand. Besides this, there is also present a small amount (one part) of the urates of soda, ammonia, potassa, lime and magnesia, and the hippurates of the same salts. Besides these salts, we have present in the urine normally, others, as the lactates, chlorides, etc. But the retention of these salts in the blood does not seem to be fraught with as much danger to the animal economy as the retention of urea, for it is now known that an excess of urea in the blood will, in a few days at farthest, lead to coma, convulsions and death.[*] Such having been repeatedly demonstrated as true, it becomes at once a question of no small practical import to us to know how to secure the elimination of this poisonous element, urea, in those cases where nature fails to accomplish its elimination alone and unaided.

In the healthy state the blood of the renal artery contains about twice as much urea as that of the corresponding vein, thus conclusively proving that urea is not manufactured in the kidney, but that it is simply extracted in solution, and discharged with the urine. The same is true with the other urinal salts, and no salt has been found in the urine that has not been clearly proven to exist in the blood. This is further proven to be the case by compensating efforts of nature in eliminating these excrementitious principles by other organs to some extent, as the lungs, skin, alimentary tract, etc., when for any reason the kidneys fail to perform their functions. The vicarious discharges of these organs under such conditions are found to abound in an excess of urea, and further, it is known that while such abnormal discharges continue, there is to be found no great excess of urea in the blood. But when they cease, and the kidneys still fail to act, symptoms of uremic poisoning immediately appear, and urea appears in the blood in large quantity. From this physiological truth we learn a practical maxim worthy of notice, viz.: that if the kidneys fail to eliminate urea, we can compensate this failure by the free use of emetics, cathartics and diaphoretics, and thus often tide a patient over a critical point in disease. In such conditions I doubt whether we will ever find any agent more valuable than saline cathartics, freely used when not contra-indicated. Prevent the formation of urea by the waste of tissue we cannot; but we can, in many cases, eliminate it by some other organ than the kidneys. Urea thus eliminated is mostly in the form of the ammoniacal salt.

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[*] Wilson and Rayer attributed many nervous complications, as convulsions and coma from uremia, to the retention of urea in the blood. Bernard disproved this theory by injecting urea into the veins of animals, which caused no toxic effects on them. Frerichs then claimed that the nervous phenomena were caused by a change of urea into carbonate of ammonia, which he seemed to demonstrate by injecting ammonia carbonate into the veins of animals, thus causing convulsions, coma and death. Bernard then demonstrated that carbonate of ammonia was always found in the blood, and repeated the experiments of Frerichs without corresponding results. The nervous symptoms supposed to be caused by the retention of an excess of urea are not proven to be due entirely to this cause. Schothin thought they were probably produced by some element now included in the so-called extractive matters not yet discovered. But it still seems to remain unproven that the abnormal nervous phenomena are due to the presence in the blood of any single element or principle that should be eliminated by the kidneys. Urea injected by Bernard into nephrotomized animals seemed to hasten the appearance of convulsions, coma and death. (*See note on Uræmia, Cazeaux' Midwifery, fifth American edition. By William R. Bullock.*)

Urea taken into the system or injected into the blood is a very active diuretic, and by this means is very quickly eliminated, and no poisonous effects are noticed. But if it is injected into the circulation of a nephrotomized animal, the evidence of its poisonous effects speedily appear, and death soon follows coma and convulsions.

There can be no doubt of the influence exerted by nervous impressions over the flow of urine. Thus fear, great mental anxiety or labor, sudden shock, hysteria, etc., have often been observed to increase the discharge of urine. We can easily understand that this is the case when we remember that the kidneys are largely supplied with branches of nerves from the solar plexus of the sympathetic, which ramify through its substance with the vessels, the size of which they control by causing them to contract or dilate, according to the impression received at the nerve center.

When we know that the flow of urine is, as a rule, proportionate to the blood pressure, we are enabled to explain many of the physiological phenomena of the organ and infer many of its pathological conditions, and how many diuretic agents act. But while, as a rule, the amount of urine discharged is proportionate to the blood pressure, it is not invariably so, for it may be very materially modified by nervous influence, so that when the blood pressure is high the quantity of urine eliminated may be small.

We are not yet fully informed of all the modifications on the renal action produced by various conditions of the nervous system. Some very curious and interesting facts have, however, been demonstrated. In his interesting and novel experiments upon artificial diabetes in animals, Bernard found that when irritation was applied to the floor of the fourth ventricle, in the median line, exactly in the middle of the space comprised between the origin of the pneumogastrics and the auditory nerves, the urine was increased in quantity and became strongly saccharine. Applied a little above this the urine was simply increased, but not saccharine (Flint's Physiology, vol. iii, p. 173), and when punctured a little below this point the urine became saccharine, but was not increased in quantity. Section of the nerves supplying the kidney is followed by an increased flow of urine for a time—a few hours. If the divided nerves are galvanized, the flow at once is diminished. It is thus observed that the varying conditions of the nervous system exert great power over the kidneys in controlling their action.

The prompt removal from the blood of certain matters is really surprising. Thus ferro-cyanide of potassium is found to appear in the urine in one minute after being taken into the stomach. (Erichsen.)

And various articles have been detected in the urine in an incredibly small space of time. But these physiological experiments demonstrate unmistakably to us how rapidly and quickly the kidneys act in removing from the system the excrementitious matters that result from the process of disassimilation, and indicate the necessity of prompt action on our part, in cases where, for any reason, these excreting organs are disabled by disease or accident.

The changes of the blood as it passes through the kidneys are interesting. There is less urea and of the urates and less water, as well as less of any of the urine salts in the blood returning from the kidney than is found in the renal artery. Some of the constituents undergo a little change, as pancreatine into pancreatinine, etc., but these are neither of great importance or numerous. The blood drawn from the renal vein does not near so readily coagulate as that found in the artery, but this very notable disappearance of fibrin has not yet been satisfactorily explained. (Flint.) Again the quantity of blood sent to the kidney is so enormous that it is but very partially deoxygenated and carbonized, the change being about two per cent of that from other organs and tissues. Hence the blood in the renal vein is very much like arterial blood in appearance. This indicates that the chief object of sending the blood to the kidney is for the purpose of execretion.

The quantity and constituents of the urine vary with the conditions and surroundings of the system, and is varied with the quantity of exhalation from the skin, lungs and alimentary discharges. Between the skin and kidneys there is a close relation in regard to excretory power. The temperature, muscular exercise, mental labor, anxiety, diet, and quantity of fluids taken, all exert a marked influence over both the quantity and quality of the urine. These it will be noted each exert a greater or less influence over the blood pressure, and through this the discharge is increased or diminished, as a rule.

From the physiological facts here stated, can we not bring to bear a diuretic influence by remedies to suit our cases more rationally, than to simply prescribe reputed diuretics at hap-hazard or in routine style as is too often done? We make no resort to remedies, as a class, where physiological principle can be better brought to bear, than in diuretics. But empiricism has for the most part governed prescriptions of this kind. Agents that stimulate the heart and increase the blood-pressure, will increase the flow of urine. Thus it is that squills, foxglove, etc., act as diuretics, rather than by any elective affinity they possess for the kidneys *per se*, and an increased flow of urine under the use of digitalis is the surest evidence that it is increasing the arterial tension, hence it has obtained a just pre-eminence among diuretics, needed, where there is failing heart action. On the other hand, it is not a valued diuretic in cases where the arterial tension is already too great, and its toxic effects are here more quickly developed than under any other conditions. A review of old authors on digitalis points out that when it acts as a diuretic, its influence over the heart is most salutary. This is true, but it gets "the cart before the horse" in explaining its action, for it is the improved blood pressure that yields the increased flow of urine. The influence of blood-pressure to increase the flow of urine, however, is not always necessary. If a dilatation of the renal vessels can be effected the same end is measurably accomplished. Hence those narcotics that cause such dilatation will act as diuretics. Hence, also, the increased flow of urine after section of the renal nerves, but such action only lasts for a few hours. Cold, by contracting the superficial capillaries, checks the perspiration and increases the capillary tension of the internal viscera; hence an increased action of the kidneys. The play of change between the skin and kidneys at varying temperatures is simply wonderful and of great practical interest.

Some agents affect dilatation of the renal capillaries by their influence over the vaso-motor nerves. These are probably diuretics in reality. Such agents are juniper and the various salts of potash. If these are combined with an agent, as squills or digitalis, that will increase the blood pressure, then we have, on physiological principles, an invaluable diuretic compound, and one that ought to and will generally secure a large flow of urine.

If, however, we want a depurant diuretic, such a combination is not as valuable as the potassa salts alone, for these act more directly upon the kidney, by causing dilatation of the vascular radicals, without so much increasing the flow of water. Buchu and juniper have a similar effect, and by them we relatively increase the amount of excrementitious matter in the urine; hence their value in the early stage of chronic albuminuria. Such diuretics, however, would be contraïndicated in cases where the urine is scant from failing circulation, and would very probably increase the trouble by causing further cardiac depression. Thus we see that there are distinct classes of diuretics, and while they may often be profitably combined, they nevertheless cannot be substituted one for the other, as the plain indication for the one is a pointed contraïndication for the other.

Virchow has shown that there is an antagonism between those branches of the renal artery which pass to the cortical substance and glomeruli, and those which supply the vaso-recti and renal pyramids. The former are acted on by vascular diuretics, as squills and digitalis, when we simply have an increased flow of urine. The latter are acted on by the depurant diuretics, as the salts of potash and buchu, which increase relatively the solids in the urine. We can thus understand how a combination of the two will act admirably in proper cases. And this experience has abundantly proven.

INFLUENCE OF MATERNAL IMPRESSIONS UPON THE OFFSPRING.

Read before Detroit Academy of Medicine by Dr. F. L. Tiffany.

That the mind exerts an influence over the organs of the body, not under the control of the will, is an established fact. "Certain emotions," says Hammond (and here I will say he is authority for many of the ideas expressed in this paper), "increases the action of the heart; others give rise to the blush of shame or modesty; another emotion impedes the movements of respiration; an effort to control the manifestation of feeling, or to prevent the expression of grief, causes a painful spasmodic action of the throat."

The secretions are influenced by particular conditions of the mind in a not less marked manner. The lachrymal secretion, which is formed to a limited extent for the purpose of bathing the surface of the eye, is poured out in great abundance under the excitement of the emotions. It is checked in powerful emotions; in intense grief the tears do not flow. The flow of saliva is stimulated by the sight, smell or even thought of food. And probably the same is true of the secretion of the gastric fluid. It has been ascertained by experiment that it is copiously effused into the stomachs of dogs that have been kept fasting, when flesh is placed before them. That the appetite for food is dissipated by powerful mental emotion is probably due to the suspension of these secretions. The muscular walls of the alimentary canal are excited to increased action by agitating emotions, resulting sometimes in diarrhœa. Under the influence of any disturbing emotion there is a tendency to micturition. That the secretion of the skin is increased by fear or bashfulness some of us have experienced. The mammary secretion is affected in a marked manner by the emotions. "In the nursing female," says Carpenter, "the secretion is often suddenly augmented by the sight of the infant, or even by the thought of him in absence, especially when associated with the idea of suckling." Sir A. Cooper, as quoted by the same author, states, "A fretful temper lessens the quantity of the milk, makes it thin and serous, and causes it to disturb the child's bowels, producing intestinal fever and much griping. Fits of anger produce a very irritating milk, followed by griping in the infant, with green stools. Grief has a great influence on lactation, and consequently upon the child. Anxiety of mind diminishes the quantity and alters the quality of the milk. Fear has a powerful influence on the secretions. Terror, which is sudden and great fear, instantly stops the secretion." To explain how the mind acts in producing the effect in any of these cases would be difficult; that they are facts must be admitted.

Not a few diseases have their origin in the mind. Hypochondriasis, with its chain of morbid manifestations, is produced mainly through the imagination; remove from the hypochondriac the impression that he is sick and you cure your patient. Hysteria can largely be controlled by moral influences. When younger and of stronger faith, we have watched for the disappearance of warts after the rubbing on of a split bean, and our expectations have not been disappointed. Who can doubt that magnetic quacks and infinitesimal pellets occasionally effect cures of disease of long standing, or that bread pills will produce purgation, when the patient is sufficiently confident of such a result. The results of all these cases seem to be in proportion to the faith of the sufferer in the means employed. Paralysis of long standing, it is said, has suddenly disappeared when a necessity has required the invalid to use the affected member.

"There is abundant evidence," says Carpenter, "that a sudden violent excitement of some depressing emotion, especially terror, may produce a severe and even fatal disturbance of the organic functions, with general symptoms so generally resembling sedative poisoning as to make it highly probable that the blood is directly affected by the emotional state through nervous agency; and, in fact, the emotional alteration of various secretions seems much more probably attributable to some such affection of the blood than to a primary disturbance of the secreting process itself."

While the influence of the habitual state of the mind upon the general nutritive process, as manifested by the well nourished appearance of those who are free from care and anxiety, contrasted with the haggard look of those who are a prey to continual disquietude, is familiar to every one; the change in the nutrition of a specific part by strong emotional excitement is not so often observed. The following case is in point, quoted from Mr. Carter: "A lady who was watching her little child at play, saw a heavy window sash fall upon its hand, cutting off three of its fingers; and she was so overcome by fright and distress, as to be unable to render assistance. A surgeon was speedily obtained, who, having dressed the wounds, turned himself to the mother, whom he found seated, mourning and complaining of pain in her hand. On examination, three fingers, corresponding to those injured in the child, were found swollen and inflamed, although they had ailed nothing prior to the accident. In four and twenty hours, incisions were made into them and pus was evacuated, sloughs were afterwards discharged, and the wounds ultimately healed." A larger collection of facts are needed to establish the relation indicated, but taken in connection with the change in the secretions by similar influence, it is rendered more creditable.

The influence exerted by the mind of the mother over her unborn offspring, though the connection between cause and effect is no more mysterious, has not been so generally believed as many of the examples cited.

From the earliest period of historic record, it has been a popular belief that impressions made upon the mind of the mother, were, in some way, propagated to the fœtus. In the 30th chapter of Genesis, we find Jacob understood and acted upon this principle, much to his advantage. Nor has the opinion been confined to a popular belief. Scientific advocates in abundance there have been, who have furnished examples which, to our mind, are better explained in the way claimed than in any other. The popular opinion, that all markings are caused by impressions conveyed through the mind of the mother, is founded in error. The slight or transient impression, none who have considered the matter would claim adequate to produce changes in the fœtus. It is only the powerful and lasting influence on the mind, that is influential in bringing about those abnormal conditions, not infrequently seen in the new born child. There is no anatomical or physiological reason why the fœtus should not be acted upon by the mind of the mother. An extremely thin membrane separates the blood which circulates through its body and the blood of the mother, and it is thus impressed with the bodily and mutual characteristics which have their origin in her brain and nervous system. "The germ comes from her ovary, with a tendency to take on her bodily and intellectual characteristics." If she be malformed, or have marked mental tendencies, the being which results from it will probably be similarly affected. After the ovum has been fertilized the blood is the only connecting link between it and the mother, and it is through this medium that all impressions must pass from mother to offspring. It is well known that the female may imbibe blood from the fœtus, by which she transmits attributes to a subsequent offspring of a different male parentage; hence, children of a second husband often have characteristics resembling the first. Illustrations of this principle are very numerous in the lower order of animals. It is said the wife, in time, even comes to resemble her husband in mental and physical characteristics through this influence. Secondary syphilis is occasionally transmitted to a female, who has never had primary symptoms, while the father shows no recent syphilitic disorder. The father communicates the disease to the fœtus and from the blood circulating through its body, her system becomes inoculated with it.

A striking example, illustrating the effect of mental excitement upon the embryo, occurred after the siege of Landau, in 1793. "In addition to a violent cannonading," says Carpenter, "which kept the women for some time in a constant state of alarm, the arsenal blew up with a terrific explosion which few could bear with unshaken nerves. Out of ninety-two children born in that district, within a few months afterwards, Baron Percy states that sixteen died at the instant of birth; thirty-three languished from eight to ten months, and then died; eight became idiotic and died before the age of five years; and two came into the world with numerous fractures of the bones of the limbs, probably caused by irregular contractions. Here, then, is a total of fifty-nine out of ninety-two, or within a trifle of two out of three, actually killed through the mother's alarm, and the natural consequence upon her own organization; an experiment (for such it is to the physiologist) upon too large a scale for its results to be set down as mere coincidences."

If it be admitted that a powerful emotion exerts such an influence upon the heart as almost to arrest its motion, and cause fainting; upon the alimentary canal as to cause diarrhœa; that the milk of the mother be so changed in quality as to cause convulsions, and even death of the infant; can we doubt that deformities of the embryo may result from a similar cause? How these changes are produced, our knowledge is too limited to explain. The suggestion of Carpenter, in reference to various secretions changed in quality or quantity by mental conditions, seems to offer as plausible an explanation as any, viz: that the blood is primarily affected. We can only accept the facts, if facts they are, and leave the explanation to posterity to clear up.

ZYMOTIC DISEASES—THEIR PROPHYLAXIS.

Read before Union Medical Society of Wayne, Oakland and Washtenaw Counties.

By Dr. D. C. Holly, Vernon, Mich.

It is not necessary to remind the physician, that the responsibilities of his profession are the most weighty, the self-imposed duties of his life the most onerous of any profession or vocation within the grasp of the human intellect; you all know it, you all feel it. And, as conscious, learned and thinking men, you have all, doubtless, at times, felt this responsibility too great to be borne alone; hence, the necessity of such gatherings as ours to-day, when, in seeing each other's faces, and grasping the friendly hand, we may, for the time, at least, bear each other's burdens, in a measure, and renew our strength for the future labors and toils of the way.

And, inasmuch as our rest from our professional work in such meetings as this, our annual gathering, is very much like giving rest to the weary, throbbing human heart, whose physiological *role* is to be ever moving; so we, whenever we vouchsafe to ourselves the freedom of a day of professional relaxation and social enjoyment, like the present, see to it, always, that our self-imposed tasks and mental efforts are such that the actual labor and work of this restful day will keep us busily engaged in thinking and working for the three subsequent months, at least.

As some of you may remember, at our last meeting, you, through our president, directed me to prepare a paper to be read to-day; I have obeyed, not willingly, perhaps, but, as it were, through constraint; therefore, I must ask your patient indulgence in listening, and perhaps, also, your subsequent charitable criticism, as I shall attempt to present for your consideration a few desultory thoughts on zymotic diseases; with, perhaps, a few practical hints respecting their prophylaxis.

It is no new subject, but you will all agree with me in admitting its vast importance. It is even estimated, by recent and high authority in the Scottish capital, from careful examination and collection of the Registrar General reports, that in Great Britain alone fully 100,000 human beings die annually from zymotic poisons; and, furthermore, the number attacked, represented by these deaths, probably amounts to 10,000,000. And it is by no means likely that our own country, with its millions of population, though much less densely populated, and consequently less exposed to crowded poison, can possibly show very much of a falling off from this frightful death roll. And so you may go on, and visit every community upon the face of the round earth, and everywhere you will find the same fearful holocaust offered up to this insatiable moloch—zymotic poison.

Doubtless some of you might be startled by this statement, were it not for the fact that you are medical men, and as such have long since learned, in the practice of your profession, not to be startled at anything; but methinks I hear your quiet enquiry for a more elaborate description of this potent agent which plays such terrific havoc with human life.

What then is the nature of this poison? Is it of vegetable, animal or mineral origin? Is it solid, liquid or gaseous? Does it taste sweet, sour, bitter, nauseous, salt, acrid, or is it tasteless? Does it smell pleasantly, or offensively, or is it odorless? Is it transparent or opaque, colored or colorless, acrid, alkaline or neutral? Has it any known reactions with chemical reagents, or other distinctive properties by which it can be known? Is it a simple binary, ternary or quarternary body? What is its name? Who was its discoverer? Has it no antidote? In short, has it been seen at all?

The fact is that the substance to which I allude in no way resembles any of the toxic bodies of the materia medica; excepting that it is, in the fullest sense of the term, a deadly poison; and yet it cannot be contained in stoppered bottles, or weighed in grammes or centigrammes or millegrammes, nor measured in minims.

Moreover, it differs from all other poisons in this particular respect, that while their actions are confined to the person affected, its action, on the contrary, renders the individual poisoned poisonous. One may, without risk to life, attend assiduously upon, and sleep nightly in the same chamber with a patient suffering from a toxic dose of strychnia, opium or alcohol, or any of these pharmaceutical poisonous compounds; but one who has not already been attacked by, and of course survived the conflict with the virulent entity in all its phases, cannot, without grave peril, attend upon a person suffering from its effects. He or she might escape, but the risk incurred would be great, since the patient's blood undergoes a mysterious change, whereby it and the tissues are converted into poison, the blood being often literally soaked and enveloped in an atmosphere of keen infection: saliva, urine, fæces, breath, sweat, and skin scurf may all be saturated with it.

This baneful entity is known by the generic term of zymotic poison, a word derived, as you all are aware, from a Greek word signifying *leaven*, and a person under its influence is said to be in a state of zymosis or fermentation. It has received this name because, when it affects the blood, certain phenomena are evoked, analogous to those caused by the addition of yeast to a substance susceptible of fermentation. Supposing it possible to add to an aqueous solution of grapes, or other fruit juice, or a mixture of honey and water, a single cell of the yeast plant (*torula cerevisiæ*), this speck of matter may be about the size of a human red blood corpuscle, that is about the 2,500th of an inch in diameter, and, of course, capable of being seen only with the microscope. Supposing, further, the solution is kept at a temperature near 70° Fahr. Then, in a few days, probably hours, from the single cell millions are generated, so as to render the liquid turbid, and form a scum at the top and a sediment at the bottom. During this process the temperature of the fluid is sensibly higher than the surrounding medium, and *carbonic anhydride* is evolved in large quantity. Ultimately, the escape of gas gradually ceases, and the saccharine solution is now found converted into a mixture of alcohol and water, incapable of further fermentation.

Now, to illustrate the other side of the analogy, supposing I were to wet the point of a needle with the smallest possible portion of lymph from the body of a small-pox patient, and push it under the skin of a person unvaccinated, who had not suffered from small-pox, then, a thousand chances to one, in a few days, perhaps hours, the recipient of the lymph feels out of sorts, has headache, backache, nausea and vomiting, thirst, a high pulse and hot skin; in other words, is decidedly feverish. In about three days after the onset of these symptoms, a papular irruption appears on the body, which soon forms vesicles or blebs. These may be few or many, separate or confluent, but the clear fluid with which they are tumid has the same specific infective nature as that with which the point of the needle was wet, which has obviously caused them; that minute portion having now, probably, multiplied to an immeasurable extent. If the patient survives, he or she is now insusceptible of a second attack of these symptoms, which I need scarcely say to you, gentlemen, are those of small-pox, and the lymph inoculated by the needle is zymotic poison. These, you observe, are both cases of pure infection, and the analogy is about as perfect as possible, considering that in the one case we are dealing with what, in a sense, is dead matter, and in the other with a living organism. You observed: 1st. The minute speck of yeast, and of small-pox lymph, which evoked their respective phenomena. 2d. The elevation of temperature in both cases; the fermenting liquid is abnormally warm, the small-pox patient highly fevered. 3d. The enormous multiplication of the yeast and of the lymph. 4th. The yeast frothing to the periphery or surface of the fluid, and the small-pox eruption forming, as it were, lymph bubbles on the skin. 5th. Both are infectious, a portion of yeast from the alcoholic solution would cause fermentation, a portion of lymph from the inoculated patient would cause small-pox. 6th. The alcohol will not again ferment, the patient will not again take variola. 7th. The saccharine solution will ferment, as it were, spontaneously, because torula cells are constantly floating about in the atmosphere and fall on its surface; so may a person, as it were, take small-pox spontaneously, by breathing air contaminated with that specific poison. These are, also, both cases of pure infection, though in neither is the infecting agent previously visible.

Now, I have chosen small-pox to compare with fermentation, simply because it is a typical species of the germs zymotica, the other chief members of which are scarlatina, measles, diphtheria, typhus and enteric fever, and cholera, and with equal good reason, so far as the latter is concerned, we may assign to the same class malarial or periodical fever. And with the exception of periodical fever, these diseases are generically related in that they are caused by a something entering the blood, reproduces itself enormously, rendering the secretion and excretions of the affected person poisonous, if inhaled or swallowed by a healthy individual, susceptible to their action. Also, that they commonly only make one attack, and always cause a hot skin and high pulse.

Their specific differences are so remarkable and distinct, that, with few exceptions, physicians think each zymotic disease caused by a separate poison. For example, you may be called to see a patient who sickened two days before, and find him complaining of thirst and headache; he is fevered, prostrate if old enough, complaining of great debility, the eyes suffused, the tongue probably dry, furred, and studded with red points, the throat swollen and tender, and skin covered with an exuberant efflorescence of bright scarlet dots, and you pronounce the case scarlatina. Or, perhaps, the patient may have swelling of the eyelids, with eyes red and watering, and intolerant of light, sneezing, dry cough, and hoarseness, with difficulty of breathing; on the fourth day of the fever the skin becomes covered with small red dots, which evalesce into slightly raised crescentic blotches, and the case is diagnosed as measles. Or, the patient may have stiffness about the neck, slight diarrhœa or not, nausea, pain on swallowing, increased secretion from buccal and pharyngeal mucous membrane, fetid breath, the posterior nares pouring out a free secretion of a slightly yellowish color, but of an acrid sanious character, sometimes excoriating the upper lip and alliæ of the nose; the back part of the throat covered with specks or patches, like damp, dirty, wash leather, and from the symptoms you certainly would be justified in pronouncing the case diphtheria. Or, the patient may have frequent chills, a soft pulse, dry brown tongue, constipated bowels, heavy, flushed, smoky countenance, stupor or wakefulness, prostration, delirium; about the seventh day of the fever the skin is covered with irregular spots of a dusky, mulberry hue, at first disappearing on pressure, slightly elevated, but soon becoming persistent, symptoms showing the case to be typhus fever. Or, the patient may have pains in the limbs, great weakness, loose bowels with very offensive stools, which may, after a little, contain blood; glazed, dry tongue, with ammonical breath, a pale, languid face, with a peculiar, livid, hectic flush upon a portion of each cheek, the same peculiar congestive redness is not infrequently observed upon the hands, clear eyes, with pupils more or less dilated, and the mental faculties not as much obscured as in typhus; about the eighth day a few elevated and isolated rose colored dots, probably, are found on the abdomen or chest, vanishing on pressure, appearing in successive crops, which last two or more days, and you find yourself face to face with enteric or typhoid fever. Or, the patient quite well a few hours before, may have severe diarrhœa, with evacuations like rice water, cramps in the limbs, causing the muscles to be hard as wood, or contracted into knot-like masses, the circulation and respiration impeded, the nose, tongue, ears, breath and extremities icy cold; the lips and general surface blue or livid; the eyes greatly sunken, the pupils contracted and fixed, the complexion muddy, and the features pinched, the whole body shrunk, and intensely prostrate; perhaps death taking place before you have had time to prescribe for what is too obviously a case of Asiatic or epidemic cholera.

The differences in the symptoms of these diseases are held as sufficiently pronounced to justify medical practitioners, as already stated, in regarding them as specifically distinct. But, moreover, they have other characteristics which seem to prove this beyond a doubt.

Of the periodical fevers, classed as they are, by recent and high authority, among the germs zymotica, and, perhaps, better belonging thereto than to any other at present known nosological position; nevertheless, we shall not attempt to consider them, inasmuch as they hardly come within the limits, or partake of the peculiar characteristics which, in this paper, we assign to zymotic poison, consequently will not be further noticed.

There are two leading theories extant of the nature, origin and operation of zymotic contagia, viz: the germ theory, and the physical or physico-chemical theory.

Believers in the germ theory hold that zymotic diseases are caused by living vegetable organisms or ferments, or fungus spores, which, entering the body, reproduce themselves, and pass through various changes, that evoke the characteristic phenomena pertaining to the special organism in the body, which may be scarlet fever germ, a small-pox germ, a cholera germ, etc., etc., each disease having its special ferment or germ.

This theory is founded on the analogy between zymotic disease and fermentation already noticed; and also putrefaction, because the blood, and other fluids in the body of a zymotic patient, seem undergoing a putrescent change. The germ theorists also affirm that putrefaction, in all its phases, is originated and maintained by germs which, especially in densely populated places, are floating in myriads in the atmosphere, and only need a congenial soil, such as dead organic matter, or a *weakly vital organism* in a condition favorable for their reception, to set them fructifying.

Now, in order that I may lay this theory fairly before you, it is necessary to say something of putrefaction. If a portion of urine, blood, serum, flesh water, or other animal fluid, be set aside for twenty-four hours, and then examined microscopically, it will be found *swarming* with *organisms* in active motion, called generically, *monads, bacteria* and vibrones. The first are named from their being the smallest and simplest of all animalcules, measuring from $\frac{1}{40000}$ to $\frac{1}{100000}$ of an inch. The second, from their rod like shape, and the third from their vibratile movements.

The fluid, also, soon gets slightly turbid, and distinctly fetid; its reaction is neutral or alkaline, but never acid. It continues thus about twelve months, when the organism, turbidity and fetor gradually disappear, and it now gives no response to the tests for albumen. These are the chief physical phenomena, constituting putrefaction and bearing on zymotic disease.

Space will not permit in this paper to go into a full discussion as to just how these infusoria may originate, whether springing from pre-existing *ova* or arising *de novo*. That is life springing into existence without any previous existing life. Possibly microzymes may arise *de novo,* and also propagate biogenetically. Be this, however, as it may, the fact remains that minute organisms are present in all putrefying solutions, in whatever way they get there, and while the germ theorists assert that they are the cause, there are others who maintain they are the result of putrefaction; the former also consider their *role* as *malignant*, and the latter as benign. The chief points adduced to show that these infusoria are the cause of putrefaction and fungi the source of many plant diseases, are: First, their presence in all putrefying fluids. Second, their absence in all fluids not putrefying. Third, it is asserted that many diseases, both of animals and plants are caused by living organisms, such as animal parasites and fungi.

The opponents of this theory hold that these organisms are the result of the conditions of their *habitat*, and their concomitants. First, because whether bacteria or fungi, they are only found on the parts of animals or vegetables with *lowered* vitality, or in their dead tissues. Second, by increasing the lowered vitality or antisepting the dead tissues they disappear. Third, contagious *virus* is destitute of the qualities of any known vegetable or animal parasites. Fourth, no specific virus can be made to yield any specific organism. Fifth, when microzymes appear in infection matter, it ceases to infect.

The first set of these propositions imply that the functions of microzymes are hurtful, while in the second set, a benign role is attributed to them and in my judgment correctly, and we may well adopt the beautiful language of Prof. Owen as a fair exposition of scientific truth in regard to the offices of the infusoria.

Consider, he says, "their incredible numbers, their insatiable voracity, and that it is the particles of decaying animal and vegetable bodies they are appointed to devour and assimilate. Surely, we must in some degree be *indebted* to those *overactive* invisible scavengers for the salubrity of our atmosphere. Nor is this all, they perform a still more important office in preventing the gradual diminution of the present amount of organic matter upon the earth, for when this matter is dissolved, and suspended in water in that state of comminution and decay which immediately precede its final decomposition into the elementary gases and its consequent return from the organic to the inorganic world, these wakeful members of nature's invisible police, are everywhere ready to arrest the fugitive organized particles and turn them back into the ascending stream of animal life. Having converted the dead and decomposing particles into their own tissues, they themselves become the food of large infusoria, and of numerous other small animals, as the rotiferæ, which in their turn are devoured by larger animals, as fishes, and thus a pabulum fit for the nourishment of the highest organized beings is brought back by a short route from the extremity of the realm of organic matter. Time would fail me to pursue further this line of thought.

I come now to consider the physical theory. This theory first propounded by Liebig, regards putrefaction as a transformation or new arrangement of the atoms of a compound yielding two or more new groups, and caused by contact with other substances, the *elementary particles* of *which* are *themselves* in a state of *transformation* or *decomposition*.

It is a communication, or an imparting of a state of motion which the atoms of a body in a state of motion are capable of producing in other bodies whose elementary particles are held together *only* by a feeble attraction.

Believers in this physico-chemical theory, thus hold that putrefaction is not caused by, and zymotic poison does not consist of living germs.

They contend that putrefaction, as stated, is propagated by contact with minute portions of putrid matter, which also is the mode of multiplication, and the form assumed by zymotic poison, whether it be expired from the lungs, exhaled from the skin, ejected from the bowels or directly inoculated into the living body as from a post-mortem or dissection wound. And how perfectly this view accords with the progress of *septicæmia*, and permit me gentlemen, *en passant*, feelingly to remark that this *septicæmia*, like a baneful sprite or portentous shadow follows *closely* and *stealthily* in the *footsteps* of every one of us. Already from the ranks of our noble profession has a large phalanx of splendid men gone down through the gates of death; martyrs! Self immolated upon the altar of science, perhaps from too great a zeal in their pursuit after pathological knowledge and science, perhaps an unnoticed abrasion upon a finger, or the slight slip of a scalpel, and it was done. Peace to their *memories.* May they grow brighter and greener with the lapse of ages.

Perhaps the most feasible enunciation of the physical theory is that of Dr. B. W. Richardson, of which the following are among the chief points: "Zymotic poisons are organic products, derived from the secreted fluids of the body, so that a zymotic patient is poisonous, precisely as a cobra di capello is poisonous—he is secreting virus, which by contact with a healthy person, may cause disease.

"As each secretion of the body in its healthy state has specific properties, so each in its diseased state acts as a specific poison, and from its local position, when thus acting, peculiar local symptoms are set up characteristic of the disease. There is thus a different secretion forming a pabulum for each poison, one for small-pox, one for scarlatina, and so on. According to the germ theory, each zymotic case yields an enormous number of germs, all of which retain their vitality amid extreme temperatures, so that the wonder is the world is not depopulated with them.

"But the physical theory places zymotic *virus* under the same atmospheric influences as other organic matter, whereby it is soon reduced to its elementary forms, hence the dead are not contagious, and epidemics cease." Moreover, taking this view of the matter, we see at once the wisdom and utility in all suspected cases of thorough and complete disinfection whereby we may, as it were, hasten the death of the infecting virus.

But still we have to consider the important question, what is the specific nature of zymotic poison. Be it living germ, putrid *particle*, or vitiated secretion, if it be at all tangible, what does the microscope or the test tube say about it? Briefly, it must be admitted that all the most refined and ingenious methods of research as to the presence or properties of the mineral or vegetable poisons, physical, physiological, toxicological or antagonistic, afford but a tantalizing, yet withal encouraging glimmer of light when applied even to reveal the presence, let alone unmask the specific zymes of zymotic virus.

It is true that M. Chaureau and Dr. B. Sanderson claim to have discovered the proximate infecting principle of variola and vaccinia, both existing in the shape of minute solid particles about $\frac{120}{1000}$ of an inch in diameter, and have probably quite satisfactorily demonstrated the truth of their discovery by a number of carefully conducted experiments.

And one time Prof. Saulsbury, of Cleveland, Ohio, claimed that he had discovered the essential cause of rubeola in the shape of a fungus growth or microzyme infesting wheat straw, but this has not been sustained by other observers.

At present, it must be confessed, as already stated, that of what the infecting principles of zymotic contagia consists, no one knows. The discovery that the solid particles in vaccine and variolous lymph are the essential virus of these substances is one of the golden grains of fact that have been washed out of the worthless sands of hypothesis, but as regards their particular constitution, again the sum of our knowledge is—no one knows.

Having thus far led you over ground, in which I have endeavored to show not only what little really we do actually know, but in dark and dismal contrast to this to confess the vast extent of our *ignorance*, we well come to more practical matter. We have all of us doubtless in our daily routine of professional toil, often wished in our inmost heart that a more general knowledge of some of the simple laws of hygiene could by some means or other be so diffused through communities as to bring forth beneficial practical results. Gentlemen, you must become emphatically public teachers. It is through our noble profession alone that the masses must be educated to a certain knowledge of the laws that govern life and death.

Not long since Dr. Nichols, in the *Boston Journal of Chemistry*, remarked "that when a man built a new house he generally dug twó holes in the ground, the one designed for the purposes of a well to supply himself and family with drinking and potable water, the other to fulfill the purposes of a cess pool or privy vault, and these not infrequently are only a few feet apart. And it certainly is no matter of surprise to any thoughtful mind that the deeper hole or well should very soon drain, and that effectually, the more shallow pit or privy vault. It is true that in almost every community you will find wise ones who will say that it is only a sulphur vein of water that has broken into the well, only rendering it the more wholesome and salubrious, but the physician's educated senses recognize, alas, too truly, the poisonous sulphureted hydrogen gas generated in the contiguous privy filled with decomposing human excreta. Nor is this all, go to the back door of the kitchen on a warm afternoon in July or August, and the repulsive odors that will greet your olfactories will not fail to shadow forth in no uncertain outline to your mental ken, the spectre shadows of cholera infantum, cholera morbus, or its more dreaded congener, epidemic cholera. The urinals of the bed chambers, the wash of the wash basin, the filthy suds of the laundry, all indiscriminately alike, are thrown out at the back door. It will need no mathematical demonstration to satisfy any medical scientist that no decade of years will elapse ere zymoses stealthily and serpent-like, will creep forth from more sources than one to sting fatally, it may be, the fairest and most beautiful of that unhappy household. And think not that the above picture of the *sanitary* condition of a dwelling inhabited by man is exceptional. I had almost said if you would reckon the human habitations of which the above and more might truthfully be said, go and count the sands upon the shore, or number the leaves in some mighty forest. Apposite to our statement in regard to this matter of the accumulation of human filth, we clip the following from the item column of the daily press on the table before us, "The city of Ahmedabad, the oldest and one time one of the most beautiful cities in India, is declared by the sanitary commissioner to have had no sanitary arrangements for several centuries past, and the earth has become so impregnated with abominations in the shape of human and animal excreta and filth that not a drop of pure water can be obtained within the city walls; even garden plants die if watered with it." In the light of the above, we cease to wonder that Hindostan should be the native home, the congenial clime of Asiatic cholera, neither are we surprised that in some hegira from such a death-shadowed place, cholera should spring forth *de novo* from the ranks of such a filthy multitude. Let us antithetically take another view of our subject, from the February number of old *Peninsular Journal of Medicine*, 1854; the article is by Prof. A. B. Palmer, on epidemic cholera. He says, Dr. Verrollot, physician to the French embassy, near the sublime porte, has written a minute history of the spread of the epidemic cholera in 1847 through Asia and a part of Europe.

In describing its general spread, and terrible ravages, from the shores of the Caspian sea up the river Volga, among the semi-civilized Musselmans, and still more filthy and degraded Russians, he mentions with great, but reasonable enthusiasm, one place as a remarkable exception. There is a small Moravian colony called Sarepta, situated in a bend of the river in the midst of the Kalmuck hordes, eulogized by all travelers for its remarkable industry and minute cleanliness and for all other fortunate and laudable features of character. The cholera seemed to respect this sacred spot, passing by in 1830 and again in 1847 without inflicting on it the least evil." This fact, corroborated as it is by others of like character, speaks volumes on the subject of prevention, and leaves nothing further necessary to be said. Prof. Palmer sententiously remarks: "If the inhabited globe were a Sarepta, this terrible scourge would disappear from it forever."

But after this digression, we will pursue our inquiries nearer home. I suppose, with myself, you have often observed or noticed the extremely offensive odor coming from privy vaults, as you may have walked along any of our village streets almost any evening in midsummer, when putrefactive decomposition is going on with unusual rapidity. But when from necessity you are compelled to enter one of these ill-kept, foul privies, the disgusting effluvium is perfectly insupportable. It would be no matter of surprise if subsequently you were called to prescribe for those living in the immediate vicinity, particularly the children, if such there be in the dwelling, and who not only visit the out-house much more frequently than the adults in obeying nature's calls, but little girls, very often, indeed, convert the foul, offensive privy, for the want of something better, into a play house, and in warm weather spend half their time during the day there. Shall we wonder, when in addition to the above, we consider that the fluid contents of these filthy vaults are continually finding their way into wells that are constantly being used as the only source of water supply for thousands of families—shall we be surprised, I say, that we find scarlatina, diphtheria, cholera or typhoid fever springing up *de novo*?

A few years since, a severe and extremely fatal epidemic of typhoid fever developed itself in a young ladies' seminary near Pittsfield, Mass. So severe and fatal was its character that it broke up the school (it being a boarding school), and the pupils, all that were able, were sent home, and a committee of medical men were appointed to examine into the cause and origin of the disease.

The locality of the buildings in this high and beautiful and most romantic and picturesque portion of New England appeared unexceptional, the internal sanitary arrangements of the school rooms, sleeping appartments, and culinary and cooking departments, together with wholesome supply of food, were well nigh perfect. They then proceeded to examine the out-buildings, coming finally to the *privy;* the building itself, not particularly well ventilated, contained a number of seats over a vault some twelve feet in depth, with no drainage, neither had it been cleansed for several years, and constantly being used by a large number of pupils, the fons et origo of the disease was patent to the most superficial observer; the putrefactive odor to one unaccustomed to the privy was perfectly unendurable and nauseating in the extreme.

So important is this matter that I see Prof. Kedzie, of the State Board of Health, in his late report has called attention to it, recommending that the vaults be disinfected by either the dry earth system, or by frequently pouring into them several pails of a strong solution of sulphate of iron, and the contents removed once a month. I would suggest what I think a much better way, viz: Have no pits or vaults dug in the ground whatever, but have the floor of the out-house raised at least four feet from the ground, a slight excavation made, not to exceed six inches in depth, and twice a week disinfect the excreta by completely covering them with dry earth, the dry dust of the roadway or street in *quantum sufficit* will answer. Gentlemen, when the above is the universal practice of our land, I believe the average length of human life will go up twenty per cent.

Nor can we stop here; Mr. Walker in his work on graveyards presents an array of facts which prove beyond all controversy, that putrid animal exhalations have given rise to diseases that have raged like a pestilence or epidemic. He cites an instructive instance which occurred in 1733, at the parish of St. Saturnine, Burgundy. A sexton, while letting down a corpse into the vault, accidentally broke a coffin which contained the body of a fat man that had been buried twenty-three days. A discharge of sanies followed which greatly annoyed the assistants, and of one hundred and twenty young persons of both sexes who assembled to receive their first communion, all but six fell dangerously ill, together with the cure, the grave digger and sixty other persons. The disease is described as a *putrid* verminous fever, accompanied with hemorrhage, irruption and inflammation. Could anything more positive be required to show that putrid human remains will give rise to disease of a decidedly zymotic character.

You are all familiar with the well known fact that in certain conditions of the puerperal state, there is a septic influence generated so that the accoucheur sometimes unwittingly is really the instrument or agent by which zymotic poison is conveyed from one parturient female to another, and alas, how often fatally.

For ourselves, we confess with you and the rest of the medical brotherhood to a fondness for autopsies, yet we will acknowledge being a little chary how we thrust a scalpel into the corse of a parturient female dead with puerperal fever. But we wished to call your attention to what for the nonce I shall call the graveyard origin of zymotic poison.

Prof. Kedzie in the late report of the State Board of Health already referred to, analyzed some well water from Petersburgh, Monroe county, Michigan, where cerebro-spinal meningitis had been prevailing. This well or spring was situated not far from an old cemetery, and not far distant from a recently made grave; he found it to contain a noticeable quantity of albuminoid ammonia and other organic impurities sufficient to render the water very impure and totally unfit for household purposes. And yet this water had been used by several families, some of whom had sickened and died of cerebro-spinal meningitis; in this particnlar instance there may have been no dircet connection between the impurity of the water and the outbreak of the disease, but as Prof. K. observes, the presence of this albuminoid ammonia was a very suspicious circumstance.

During September and October of the present fall (1875), at Vernon there was a local outbreak of typhoid fever, very severe for the number sick, two out of six cases proving fatal; to say the least, the fact is a little remarkable, that of some four or five families, where all the cases occurred, two wells had supplied the drinking and potable water, one was situated directly by the side of an old but disused graveyard, the other at the foot of the hill where the new cemetery is situated. There may in these cases be no relation as cause and effect, but the fact may be worth recording, to be placed in the chain of evidence now being collected bearing on the subject.

Time warns me that I have already trespassed too long upon your attention and patience, and yet my subject is only sketched out; you will follow out in detail and practical results what I have been able in this paper barely to suggest. And to you and the members cosmopolitan of our noble and loved profession must humanity look for carrying out these inquiries to a practical end, and then, and not before, the prophetic vision of holy writ will be nearer fulfillment than at present.

"There shall be no more thence an infant of days, nor an old man that hath not filled his days, for the child shall die a hundred years old."

Reports of Societies.

MEDICAL ALUMNI ASSOCIATION — MEDICAL DEPARTMENT UNIVERSITY OF MICHIGAN.

Reported by the Secretary, Dr. Breakey.

The second annual meeting of the Medical Alumni Association of the University of Michigan was held at Binder's Hall, Ann Arbor, March 28th, at 6 o'clock P. M., Dr. J. J. Mulheron, second vice president, presiding.

The minutes of the last meeting were read and approved.

The secretary reported that, under the direction of the executive committee, he had endeavored to obtain the address of all the alumni possible by comparison of the medical register with catalogues, requiring a large expenditure of time, labor and patience; by correspondence with those whose addresses were known, with medical societies; and by the issue of circulars, a copy of which had been mailed to every alumnus whose address could be learned, and to medical journals, requesting notice of the organization. For these courtesies, as well as the supplemental notices in the secular press of the State and Chicago papers—rendered, with one exception, without charge—the thanks of the association are due. In pursuance of this effort, over six hundred circulars have been addressed to alumni. Considering the fact that the address of less than fifty were known before the organization; that no information beyond the catalogues could be obtained from the University, the association may justly claim to have accomplished a work of large present and prospective value to the alumni, and more particularly to the University, in thus opening communication with so large a number of her medical graduates. That their hearts are true to their *alma mater* as they remember her, and that their support of her now in the right may confidently be counted on, is attested by many assurances of fidelity and devotion in letters received.

Some of the work of his office had been delayed by poor health, and though performed under difficulties, it was cheerfully undertaken and continued, under the belief that good was being done. In conclusion, he stated that no one would turn over the labor and care of official service in the association to his successor with more cheerful relief.

The treasurer reported that he had received at the meeting one year ago		$23 10
Had paid for record	$2 50	
Stationery, postage, circulars and envelopes	20 00	
Cash on hand	60	
		23 10
And still owed the secretary, for postage	$5 75	
And for bill paid, of Detroit *Tribune*	1 00	
		6 75

Drs. **Breakey** and **Knapp** reported, in behalf of the executive committee, that the committee had issued one thousand circulars, the expense of which, with previous bill for printing, envelopes and postage, amounted to $29.75.

With regard to the action of the committee in making arrangements for the meeting and inviting the graduating class, which had been so freely criticised, they explained substantially that, not thinking it necessary or proper to follow the complainants into the newspapers, and considering themselves amenable only to the association and the profession, they were quite willing to abide the judgment of a purely professional verdict rendered on the facts.

Receiving information from various sources that the homeopathic question, so-called, would probably be discussed at the meeting, and that if students just to graduate—whose views of the matter had already been expressed in a series of very full resolutions complimentary to and in support of the position of the Faculty—were to take part in the discussion and voting on such question, any attempt to secure an expression of the "matured opinions of the alumni" who had some practical knowledge of the matured opinions of the profession in the localities where they reside—which the Faculty profess to wish to obtain—would be futile, if not a farce. And that should such business come before the meeting, the right of students to take part in it, if insisted on, would be questioned, not only because they were already committed by their resolutions to a single view of it, and would naturally side with their teachers, but for the additional reason that it is alleged by the Faculty and those who support their position, as a justification of their course, that homeopaths have gone out with every class. And as the college has no means of disowning those unfaithful to its teaching, it was the opinion of Alumni that the Association should be able to protect itself against such abuses.

In view of these opinions from Alumni from various parts of the State, the committee did not feel authorized to attempt to settle a question that the Association only could decide; and did not desire to embarrass the class by leaving them to think that their rights to participate in the business of the meeting would go unquestioned, until it might be raised at a point where it was thought it would be more unpleasant to them, than to leave them the opportunity to voluntarily avoid the discussion of a question which, it was supposed, from motives of delicacy they would neither desire to hear nor take part in.

The question of eligibility of the graduating class to active membership before they were officially declared Doctors of Medicine, was considered in the preliminary meeting, especially with reference to the desirability of their presence in the social festivities, and it was conceded that the then graduating class could not strictly be considered Alumni, but by courtesy might be constructively so considered. The question was informally raised at the meeting of organization, and the same opinion given, but without any formal vote. The committee recognized a precedent made, but not established by the single meeting of organization. The committee therefore addressed a courteous note of invitation to the class, through its president, to attend the supper and to indicate its representative to respond for it. That this action had been so hastily and unjustly judged by the class and those to whom they refer for authority, and that they were not willing to await the action of the Association, the committee can only express their regret, and look for their justification to the more disinterested judgment of the regular practitioners of the Alumni. The difficulty of any action by the committee that would have been satisfactory to all parties is evident from the fact that two members of the Faculty expressed directly opposite opinions, both as to the right of the class to be considered graduates and the propriety of the committee in not deciding that they were.

The committee were unanimous in their action, the resident members having the concurrent opinion and authority of Dr. Kedzie, the President, in writing, and they trusted the class and those who supported them would as cheerfully acquiesce in the decision of the Association fairly rendered, as would themselves.

On the acceptance of the report Dr. Frothingham, at considerable length, spoke excitedly and quite irrelevantly in denunciation of the action of the committee, until called to order by members of the Association.

Dr. Twiss urged some concession on the part of the faculty to the opinions of the older alumni, and asked to have read a paper which Dr. Maclean had given to a committee of alumni before the meeting.

Dr. Maclean said that had all fallen to the ground, and declined to read the paper.

Dr. Prescott spoke briefly as to whether the members of the graduating class were alumni at that time, expressing the opinion, substantially, that, when voted upon by the regents, they were alumni.

Dr. Herdman offered an amendment that the part of the report explanatory of the action of the committee be not accepted. Only a very few voted for or against the amendment, neither member of the committee voting. The president ruled the vote a tie, and decided it in the affirmative.

Dr. Lewis asked how the vote had been decided, and when informed, requested that another vote be taken, but was answered by Dr. Maclean, an honorary member, by Dr. Frothingham, and then by the president, that it was too late.*

Dr. Rynd made a somewhat lengthy statement—without any question before the association—concerning the history of his connection with the introduction of homœopathy in the University.

Dr. Twiss invited Dr. Rynd, who was leaving the room, to stay and discuss the present situation, and still urged conciliation, and that an effort might be made to get an expression of the older alumni as such on the present status of the *alma mater;* and that in his opinion the chief present objection to the admission of the class to take part in the business of the meeting, was the fear that such expression would thereby be practically prevented, and again requested Dr. Maclean to read the paper previously alluded to, believing that it might lead to a better understanding.

Dr. Maclean again said that had fallen to the ground, claiming that the report of the executive committee had relieved him from obligation to adhere to his written agreement with a committee of the alumni before the meeting. Though after much farther informal discussion he read the paper, but stating that he was not bound by it.

[*Dr. Maclean's paper, p. 10.*]

"As a member of the medical faculty, I distinctly say that it is my belief that the faculty, as a whole, earnestly desire to act in concert with the alumni of the University, and with the profession as a whole, and that we look to these societies for advice in the present emergency. It is further my belief that the whole faculty anxiously desire the free, full and deliberate discussion of the question of homœopathy and our relations thereto, both by the alumni association and by the State medical society.

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*The accuracy of the statement in a newspaper card from a member of the faculty, that "the association rejected the report of its executive committee," can be better understood in the light of these facts.

"I believe that the faculty are perfectly willing to present and support before the board of regents any scheme for the solution of the present difficulty which the alumni association and the profession shall advise.

"Finally, in the discussion of the subject at the present meeting by the alumni association, I undertake individually that so long as the efforts of the association are directed to the suggestion of wise plans for our future guidance, the present class of graduates shall be restricted from interfering in any way, unless specially invited by the association."

"DONALD MACLEAN."

Dr. **Smith** asked if the other members of the faculty present were willing to take the same position individually that Dr. Maclean had taken in the paper, but received no response.

Further irregular discussion followed, without any question before the association, after which no opposition was raised to the admission of the graduating class. A certificate was received from President Angell stating that they had been declared graduates by the regents, and a recess was taken, during which they signed the constitution and by-laws.

Under the order of business of reading correspondence, Dr. **Frothingham** moved that the reading of letters be postponed to the supper.

The secretary stated that he had a large number of letters from alumni from various classes and parts of the country, some in favor of the present position of the faculty, and some against it; that many of them had spoken honestly but plainly their opinions, and the committee had thought that the majority of them, at least, might be better read at the business meeting, not only because they might influence discussion, but to avoid the possibility of introducing anything at the supper that would mar the social festivities.

Dr. **Frothingham** replied that they would be in as good humor after supper as they were then. The resolution passed without opposition.

The secretary read the following resolutions, officially transmitted from the Jackson County Medical Society:

Resolved, That while we do not deny the right of the State legislature to authorize the establishment of a distinct homœopathic college under the auspices of the State University, we deplore and condemn the action of the regents in establishing the present homœopathic dependency on the medical department; and, further,

Resolved, That we do not indorse the present position of the regular medical faculty in relation to this subject, but believe they should have resigned their chairs, or retained them under such a public protest as would have testified their regard for medical ethics, and placed themselves right in the eyes of the profession of the country.

C. H. LEWIS, *Secretary.*

Dr. **Herdman** asked Dr. Lewis how many members were present at the meeting at which the resolutions were passed.

Dr. Lewis replied, fifteen or sixteen—about the usual number.

Dr. Herdman asked how many members the society contained.

Dr. Lewis replied, about thirty.

The secretary read a letter from Dr. Kedzie at the order of business calling for the president's address, in which he said:

> "I am sorry to repeat that it will be impossible for me to be present at the annual gathering of alumni. But I send you cordial greeting, and trust you will have a pleasant and profitable meeting. I also hope that the wisdom of the alumni will be exercised to bring the University out of all the dangers which threaten it, and to place it in such position that it shall be the pride and boast of every alumnus of the medical department." Very sincerely yours,
>
> R. C. KEDZIE,
> *Pres. Alumni Ass'n Med. Dep't University of Mich.*

Lansing, March 25, 1876.

Under order of miscellaneous business, Dr. Twiss made farther ineffectual efforts to induce the faculty to offer some hope or intimate some plan whereon they might work together, for the common good, in an effort to restore the college to its former standing.

Dr. Raymond made an earnest appeal to the faculty, urging that something might be done to indicate to the alumni and the profession their dislike of the present arrangement, and their wish to be rid of it, and their willingness to coöperate with the alumni in some measure for relief, assuring them that the alumni were as true and devoted to the interests of the old college in the right as they were dissatisfied with its position now.

Dr. North asked if the *alma mater* could not trust her children.

Dr. Frothingham was afraid she could not.

Dr. I. E. Brown made some remarks as to some method of getting an expression of the association on the points informally discussed.

There being no question before the meeting, Dr. Lewis moved the appointment of a committee to report resolutions.

The president asked Dr. Frothingham to name the committee. Dr. F. named Drs. I. E. Brown, Raymond, Twiss and E. Hall.

Dr. Ward here suggested the propriety of observing parliamentary usage, and including the mover of the resolution, when the president added the name of Dr. Lewis to the committee.

During the retirement of the committee, the secretary read so much of a necrological report as he had been able to make, and obtained from those present the names of a number more graduates who have died:

Name.	*Class.*	*Place and Date of Death.*	*Cause.*
John M. Alden	1852	Bangor, Mich., April, 1870	Broncho-pneumonia.
A. H. Ames	1865	Richfield. Mich., 1866	
John Andersen	1864	Toledo, O., 1869	Consumption.
George Barnes	1861	Kalamazoo, Mich., 1873	
Nathan Comstock	1860	Raisin, Mich	Consumption.
—— Cotton		Adrian, Mich	
Miss J. Copp	1873	Plainwell, 1874	Consumption.
Spencer Dills	1871	1873	Small pox.
C. B. Davison	1868	Ann Arbor, Nov., 1874	Pneumonia.

Milton A. Fellows	1860		Drowned.
H. C. Graham	1870	New Windsor, Ill	
Joseph Green	1872	Ann Arbor, 1872	Peritonitis.
Wm. Longshaw	1859	Killed at storming of Fort Fisher.	
Dennis Mahanna	1873	In Detroit, on way home from Texas to New York, 1875.	
John O'Brien	1851	Leavenworth, Kan., Dec., 1868	Traumatic paralysis.
George Ruthbon	1861	Thamesville	
John A. Ruttan	1870	Chelsea, Mich	
T. A. Sparhawk	1874	Leroy, Mich., 1874	Pneumonia.
Robert Travers			
George Voorhies	1860	Ann Arbor, 1865	Consumption.
Joseph Wygel	1861	Detroit, 1862	Consumption.
Frank Webb	1868	Alma, 1875	
Henry H. Wines	1867	Adrian, 1868	
C. H. Whitney	1873	Dubuque, Iowa, 1876	

The committee reported the following resolutions:

Whereas, Under an act of the Legislature authorizing the establishment of a homœopathic medical college in the University, a homœopathic school has been instituted in such a manner as to compel a majority of the "regular" medical faculty to become practically the colleagues of the homœopathic professors, and thus to aid in multiplying the number of practitioners of a system of medicine which we regard as absurd in theory, and in practice fraudulent and delusive; therefore,

Resolved, That we, the medical alumni of the University, deplore and condemn the present complication as tending inevitably to demoralize professional sentiment and break down the barriers of right and wrong that exist in the moral sense of our fraternity, and constitute the chief bulwarks of the purity and effectiveness of our organization; and, further,

Resolved, That we indulge the hope that the faculty will speedily indicate in some official way to the profession and the authorities under which they hold their positions, their unwillingness to adhere longer to an arrangement which they, as individuals, deprecate and deplore; and, further,

Resolved, That we respectfully request the faculty to use all their legitimate and proper influence with the board of regents to restore the department of medicine and surgery to the condition which it occupied before the introduction of homœopathy; and, finally,

Resolved, That we, the alumni, pledge ourselves to use every honorable means within our power to further the accomplishment of the consummation contemplated in the foregoing resolutions.

Dr. Frothingham opposed the resolutions in lengthy remarks, objecting to the second one particularly, as requiring the faculty under certain contingencies to resign.

Dr. Lewis said the resolutions did not contemplate such requirement as immediate resignation of the faculty, but that they should make some official protest against the arrangement to show that they were unwilling to accept it as satisfactory or permanent, not only to indicate the need of relief, but to deserve and receive the support of the alumni and the profession, while a united effort is made to secure relief, as contemplated in the third and fourth resolutions; and that, failing in such effort, it was thought the faculty ought then to resign.

Dr. Dunster objected to any such agreement made to the alumni as being "an open bargain and sale."

Dr. Palmer also made some remarks opposing the resolutions.

Dr. Allen, of Adrian, thought the faculty ought not to resign, as their places would be filled by inferior men.

Dr. **Frothingham** again opposed the resolutions, and offered the following substitute for the second resolution, viz:

Resolved, That we recommend to the alumni and the physicians of this State to organize and induce the Legislature of the State to withdraw the appropriation for the support of homœopathy as improperly appropriated in the support of sectarian purposes.

Dr. **Ward** moved to lay the resolutions on the table, which was done.

On motion, it was resolved that a committee be appointed to nominate officers for the coming year.

The president again requested Dr. Frothingham to name the committee, and Dr. Frothingham appointed Drs. Herdman and Prescott, of the faculty; Raymond, of Grass Lake; Jones, of Detroit, and Hatch, of the graduating class.

The committee reported the following nominations of officers:

		Class.	
H. F. Lyster	President	1860	Detroit.
F. M. Oakley	1st Vice President	1856	York.
H. A. Cleland	2d Vice President	1861	Detroit.
A. M. Allen	3d Vice President	1861	Adrian.
C. H. Lewis	4th Vice President	1866	Jackson.
J. W. Hawkhurst	5th Vice President	1876	
P. B. Rose	Secretary	1862	Ann Arbor.
W. B. Smith	Treasurer	1861	Ann Arbor.

The report was accepted, and by general consent the secretary cast the ballot of the association affirmatively, and the candidates were declared elected.

The association then adjourned to supper at Hangsterfer's Hall. Owing to the rumored uncertainty as to the number who would attend the supper, the committee had not felt warranted in making definite arrangements for toasts, and at the late hour at which the supper was begun—11½ o'clock—they thought it better to propose but few toasts, that there might be some time for reading letters, and gave up the thought of attempting to obtain personal responses from representatives of as many classes as possible, and reported to the president only the following:

The University	Prof. Prescott.
The Legislature	E. B. Ward.
The Medical Profession	E. Twiss.
The Class of '76	J. M. Lewis.

The president requested Dr. Frothingham to act as toast master, who, after the regular toasts had been quite briefly responded to, called for volunteer toasts, calling on Dr. C. H. Lewis, who declined, then on Prof. Maclean, who, after speaking, proposed "The Medical Press," calling on the president, Dr. Mulheron, editor of the *Peninsular Journal of Medicine*, who responded; after which Prof. Palmer was called upon, and spoke at considerable length, repeating much of the substance of his written statements, and saying, in the course of his remarks, that he did not propose to resign, and that the present graduating class knew much more about the practical relations of homœopathy in the University than did these older alumni! Upon the conclusion of his remarks, the association quickly adjourned, without a word about the letters, from the president or those who had formally proposed to have them read at the table!

In justice, therefore, to those who had the right to hear these letters, and in courtesy to the writers, we ask this brief acknowledgment of their friendly remembrance, and this explanation of why their "greetings," which had been solicited in the circular of the association, were not even read.

As they were nearly all written to be read at this meeting, and as the association did not receive them or authorize any disposition of them, the writer feels himself personally responsible to the authors to hold their letters subject to their order. Some were sent with the request to be returned if not published with the proceedings; others were withdrawn when they learned how they had been treated.

The following summary will show something of the character of the writers, and the number of alumni and extent of territory represented by the letters which were thus excluded: There were over seventy letters received in all, from fifteen States, extending from Maine to Colorado, and from one territory, representing five ex-members of the faculty, one ex-president of the University, an alumnus of the University of Edinburg of 1832, and the president of the American Medical Association, whose letter is a substantial repetition of part of one published in the faculty statement. Of the alumni who expressed any opinion on the situation, three only could be said to be fully in favor of the position of the faculty.

Accompanying this report are a portion of those of a representative character, which I have been authorized to publish, representing different sections of the country, that those who have thought the disaffection with the present condition was local and insignificant, may see for themselves. I hope that as many of them as possible may be published in full, excepting any private matter in them.

W. F. BREAKEY, *Secretary.*

BASEL, SWITZERLAND, March 25, 1876.

DEAR SIR:—Your favor of the 6th instant reached me only a few days ago. Of course it was impossible to send you any communication that would reach you to-day. I assure you it would have afforded me great pleasure to have addressed a few lines to the assembled alumni of the medical college in accordance with your request. It would have been, indeed, a still greater pleasure to have met you in person, but alas! with more than four thousand miles of land and sea between us, that is a pleasure not very easily reached.

I can now only thank you, and through you the alumni, for your and their kind remembrance of me, assuring you all that I have not ceased to feel a lively interest in the progress and prosperity of the medical college, as well as in the prosperity of all the departments of the University of Michigan, with which are bound up in my heart recollections never to be erased.

It has been my strong desire and hope to see you all once more, but God only knows what lies in the future before us.

With my best wishes for your usefulness and happiness, believe me,

Very sincerely, your friend,

HENRY P. TAPPAN.

PORTLAND, March 25, 1876.

MY DEAR DOCTOR:—You may be assured that I would do anything in my power to relieve my beloved *alma mater* from the foul stain that has fallen upon her, and to give sympathy and support to those who have stood manfully for the right.

For myself, I have always held decided and unwavering views upon the question of admitting isms or pathies of any description whatever as a part of the *educational* (?) scheme in the University. From the time when I had the honor to be a member of the medical faculty, which was then a unit in the matter, and its several professors to a man declared the most positive and unequivocal determination to resign the moment any such dishonor fell upon the institution, until now, when I contemplate the matter from a stand-point where no personal considerations obtain, I have never for a moment entertained but one view.

The function of the department of medicine in the University is to furnish a knowledge of the science of medicine and surgery—broad, universal, complete. And the moment the authorities open its doors to ignorance, bigotry or superstition in any form, whether allopathy, homeopathy, hydropathy, psychopathy, eclecticism, in its accepted sense, or any other partial, one-sided or false system—and one has just as much claim as another—then just so far that function ceases, and no man can retain or take a position in the faculty without compromising his honor as a man and a teacher.

I am entirely familiar with the apologetic arguments put forth, and I am bound to believe that the gentlemen who make them do so in all sincerity and honesty, and really believe they are in the line of duty. Far be it from me to question the motives of any man. But I cannot but suspect that, *entirely unconsciously*, self-interest may have played a subtle part in weaving such arguments as these same gentlemen, a few years ago, would not for a moment entertain, although most thoroughly familiar with the whole subject, through long, earnest and painful contemplation. Let me not be misunderstood. I repeat, that I hold every member of the faculty, most of whom are my warm and personal friends, to be incapable of *consciously* allowing personal considerations to weigh for a moment in a question of such vast importance. But in this case, when men take, and undertake to defend, a position so at variance with the *common* professional sense of what is right, and fit, and *decent*, we have a right to search out, so far as we may, the springs of action.

I confess that I have not yet seen a single point taken by the defense that to me has real weight. The most plausible is that if the ground was abandoned it would be occupied by the enemy, or at least the present faculty would be replaced by inferior or unworthy men. In the name of common sense, does not "the enemy" occupy now? And *why* should the places be filled by inferior men? Is it assumed that the country lacks competent teachers for *honorable* positions? or is it assumed that *such* men would decline disgraceful alliance? If the latter, what an admission for the present incumbents of the several chairs.

The simple fact is, it is *all wrong*, and no sophistry can right it. The regents have, for the sake of money, undertaken to say, have arrogated the power to say, what shall be taught as *scientific medicine* in the *University*. This year they say it is homeopathy. What additions they will make to the curriculum in the future of "optional studies" depends upon their will and pleasure, and no man can hold a professorship in the medical department consistently with my views of what is honorable and just.

For the consistent course and unflinching courage manifested by Prof. Sager I have unbounded admiration.

I have always been proud of the diploma I hold from the medical department of the University of Michigan, but if this foul blot is to remain on her escutcheon, I feel, as I know so many others of my brother alumni do, that I can never look at it again without feelings of profound shame and regret that I cannot exchange it for one from a respectable institution.

Regretting my inability to meet with you, with kind greetings to all my alumni friends, and with pleasant memories of yourself,

I remain, most sincerely yours,
WM. WARREN GREENE.

PORTLAND, April 7, 1876.

MY DEAR DOCTOR:—Your kind letter of the 3d instant is just at hand. I am entirely willing to have my letter published, with the personal exceptions you name, if it will do anything for the cause. I am sorry not to have kept a copy, and also not to have made it fuller and more emphatic in certain respects. For example, the faculty are making much of letters expressing sympathy for and confidence in the position they occupy. Now, undoubtedly, there are some of these persons who are honest, but I have reason to believe that for the most part they are in this matter thoughtless. An enemy, or one jealous of the University, could not desire a greater curse to fall upon it, nor could he do more to injure it than by urging the faculty to hold on. Again, many answer the leading and shrewdly fortified questions of the faculty with little thought or feeling of responsibility, and moreover are often influenced by an overweening confidence in the wisdom of those whom they have learned to reverence and admire. With reference to the first class, it is no secret that it is large, and this because of the large classes which the medical department has formerly drawn, not simply, say these individuals, on account of the superiority of its faculty, for it might be claimed to have its peers in several schools, but because of the cheapness with which instruction is obtained. To my certain knowledge, a prominent professor in a prominent medical school asked one of his colleagues how they better answer if asked their opinion upon the duty of the Michigan faculty. "Oh," said the other, "tell them to hold on by all means. There is no way we can kill the —— institution so quick." Would it not be well for the faculty to rely less upon the advice of others and recall their own unfaltering, most emphatic and determined convictions and declarations held and made prior to 1867. For never was there a *whisper* of any compromise or anything else but immediate and unconditional resignation, in case the blow came, until after it came.

I should like to have interwoven these ideas into the published letter, but I suppose I cannot very well now.

Yours sincerely,
WM. WARREN GREENE.

CHICAGO, March 25, 1876.

W. F. Breakey, M. D., Secretary Alumni Association, Medical Department University of Michigan:

DEAR SIR:—Accept thanks for your note of the 18th instant, which but for ill health and onerous duties would have been sooner answered.

As a former occupant of a chair in the medical department of your University, I can not avoid a certain amount of interest in its history. As a teacher of medicine for many years, and as a member of a profession of which I am proud (more and more each successive year), I can not too strongly express my repugnance to the unnatural association into which that branch of it represented by the medical faculty of your University has been forced. For the honor of the profession, see to it that the homeopathic gnats, mosquitoes and fleas be smoked out of your Æsculapian temple. "Have no fellowship with the unfruitful works of the ungodly, but rather reprove them." "Meddle not with pitch lest ye be defiled:" "Can a man lie down with dogs and not rise up covered with fleas?" I am not so certain of the verbal accuracy of my scraps of scripture, as I am of their immediate suggestiveness under the present circumstances.

Fail not to have the homeopathic marplots sent to Coventry—or even Detroit. It might not be unadvisable to send them into the interior to some of your vaunted "magnetic springs." It might abate much of the medicinal energy of the water, but it would at least give the infinitesimal gentlemen a chance to purge and wash themselves from their charlatanism and Hahnemannic uncleanness. Possibly the chairman of the judiciary committee, Proctor Knott, might be induced to give them a habitation in the late lamented city of Duluth.

Seriously, now, when homeopathy is confessedly abandoning in practice its ridiculous theories, it does excite wonderment that its already effete body should have gained recognition as a living thing in the otherwise eminently respectable institution of which your society are alumni.

I remain, sir, with best wishes and high respect,

Yours, in the bonds of Æsculapius,

J. ADAMS ALLEN.

CHICAGO, March 21, 1876.

W. F. Breakey, M. D., Secretary Society Alumni, University of Michigan:

Your note of invitation is before me, with the especial request that I would raise my voice on the subject of the present University complications. It would give me great pleasure to be with you, but I shall be obliged to forego the privilege of saying personally, that one of the inducements which prompted me to cast my lot with Rush Medical College, instead of remaining with my old associations, was the conviction that sooner or later I should be obliged, in self respect, to do just what my old confrere, Prof. Sager, so promptly and honestly did—resign! All honor to him!

I have no time to make war upon any wind-mill of folly, and have never engaged, in the past, in any such Quixotic pursuit; but rest assured that I should *never take service in the old mill.*

The University has been cruelly injured by the late action; and the *date* of its medical diplomas will most seriously affect their value.

In your efforts to drive out delusion and hypocrisy from its portals you have my most earnest wishes.

MOSES GUNN.

LANSING, MICHIGAN, March 25, 1876.

W. F. Breakey, M. D., Secretary Medical Alumni Association:

DEAR DOCTOR:—Your circular invitation of the 23d instant, inviting me to be present at the alumni meeting to be held at Ann Arbor on the 28th of this month, is before me, which, I regret to say, I cannot avail myself of the pleasure of accepting, on account of urgent business at home.

I extend, however, to our *alma mater* and *alumni* a cordial greeting, hoping the meeting may be a pleasant and profitable one.

I have heard that it was the purpose of this meeting to discuss the very perplexing question of homeopathy in the University.

I hope it will be considered in a fraternal spirit, and that the action will be a dignified expression, not susceptible of unfavorable criticism, but one of which each alumnus may feel proud; that irrespective of selfishness or rivalry, on one side or another, it may be the reflex of professional self-respect and advancing honor that will command the approval of every right thinking person within and without the profession.

If I understood the spirit of the State Medical Society at its last meeting, it wished simply to avoid the discussion of the question.

When it convenes at Ann Arbor in May, I suppose the subject will be fairly met and carefully considered, with good results, I hope.

Yours fraternally,

GEO. E. RANNEY.

DE WITT, Mich., March 27, 1876.

Dr. W. F. Breakey, Secretary Medical Alumni Association, Ann Arbor, Mich.:

DEAR DOCTOR—I regret that unexpected duties demand my presence at home, and deprive me of the pleasure of reviving old acquaintances and shaking the hands of former classmates who may be present, as well as the few remaining of my much revered medical teachers. I should have prized also the opportunity of making the acquaintance of more recent professors in my alma mater, and strengthening the ties which have been formed by years of pleasant and profitable professional intercourse with a goodly number of cherished acquaintances from various classes more recent than the one of which I had the honor to be a member.

I have ever cherished a warm affection for my alma mater, and an earnest desire to see her great, prosperous and honorable; and still indulge the hope that the day is not distant when those who have her destinies under their immediate control, may see the desirableness of placing her so perfectly in accord with the time-honored sentiments of her alumni and the regular medical profession of the country, as to command their hearty sympathy and earnest endeavor to aid in all honorable and practicable ways, to advance her interests, and her usefulness, and insure her universal recognition as one of the largest and ablest medical schools of the entire country.

Very cordially yours,

G. W. TOPPING.

EAST SAGINAW, March 27, 1876.

W. F. Breakey, M. D., Ann Arbor, Mich.:

MY DEAR DOCTOR—I had fully intended to leave here to-morrow morning for Ann Arbor, but last night and to-day I have something on my hands that will make it impossible for me to leave, and I had not written anything to send, for the reason that I expected to be there and speak for myself. I am very sorry that I cannot be with you and contribute my mite towards making the association meeting a pleasant and useful one, and also of saying in person to it and the profession at large that I think the present arrangement in our alma mater a great mistake, and the action of those professors who remain in the college a lamentable one. Individually they may act as they please, but they ought to understand that most people look on them as being representatives of the whole profession and chosen for their superior education to hold the place they do, and that we ought all to follow their lead. The inference is certainly a natural one, and when we refuse to consult or have anything to do with men professing to practice homeopathy, they say we should not be so bigoted, etc., for there are our best men fraternizing with homeopaths, teaching with them, and it places us in an awkward position. I am sorry for this *miscegenation*, and for one, I cannot and will not be a party to it. Hoping you will have a pleasant and successful meeting,

I am, with the kindest regards, respectfully yours,

SAMUEL KITCHEN.

LAWRENCEVILLE, TIOGA CO., PA., March 25, 1876.

To the Alumni Association of the Medical Dep't University of Mich.:

It is with feelings of pride and pleasure that I send congratulations, with cordial greeting and "God speed" to the alumni association.

It is very proper that the offspring of an honored parent should meet occasionally to revive old friendships, renew old associations and cultivate kindly and friendly feelings towards one another. Leaving our *alma mater* and going forth upon our errand of life, with new cares and associations engrossing our every thought and attention, we are apt to forget the past and those with whom we struggled in our college days.

The University of Michigan is honored in its alumni, and the alumni have reason to honor and respect its *alma mater*. This institution has always enjoyed a reputation for thorough training unsurpassed in this country, and with its advancing years has been honored and respected among the sister colleges of the land. We, the alumni, feel a great interest in the institution that gave us professional birth, and everything tending to increase the dignity, usefulness and character of the institution increases our pride, respect and veneration for it.

In the same manner, everything that reflects upon or detracts from the good name and reputation of our *alma mater* influences and affects us.

The one great desire of my heart is to see the University of Michigan honored and respected, and occupying a position among the first in the land. It grieves me to know that impious and wicked hands are plotting for its downfall, and planting the seeds of its dissolution. I feel like characterizing the conduct of the regents of Michigan University as suicidal and madness, in attempting to force an unwholesome and unnatural alliance with homeopathy in the medical department. That institution, although located within the borders of the State of Michigan, being the noble sire of so many worthy sons, belongs properly to the regular profession of the world; and the people of that State have no moral right to cripple its usefulness or degrade its status by foolish enactments. Why not create an "infinitesimal" law school, "infinitesimal" literary and scientific departments, and thus appear in their proper person to the scientific world. It is a burning shame that that grand old institution of learning is not in the keeping of truer and nobler guardians.

Think of it as we will, deplore it as we do, the moment that homeopathy gets a foothold in that institution, its destiny is sealed. It will come under the ban of the profession generally, and will be ignored and avoided by the regular physicians throughout the land. It is only a matter of experiment whether the institution remains catholic or becomes wholly homeopathic. They cannot exist together and preserve their identity—they must serve God or mammon.

It seems to me that the great mission of the alumni, and friends of the profession, ought to be to correct this *blighting blunder* before it is too late, by an expression of our disapprobation of the insult forced upon us. Let the whole profession speak. In the American medical association—in the State and county medical societies—let the protesting voice be heard. Let other institutions refuse to recognize its students, and the profession its graduates, as those of any open homeopatic institution.

Let us act promptly in rebuking this glaring insult offered to one of the noblest of professions and best of institutions. Rather than see that grand old institution of learning degraded by infusing the deadly poison of quackery into its life current, I would prefer to see it sink beneath the waves of oblivion, with the flag of its past glorious record streaming from the mast-head.

If it remains orthodox, adhering to the good old catholic faith of its founders, it will live an honored life, and be respected in the medical world.

I am truly thankful that it was my fortune to have received my diploma from the University in its most prosperous days, and under the instruction of the wise and venerable Sager and Professor Gunn, and their conferes, and I could wish nothing better for that noble institution than that the wheels of fortune could turn back to those days of its brightest and most prosperous existence.

It would afford me great pleasure to be present with you at your next anniversary, to meet old acquaintances of the class of 1866, and to form new ones, Although "absent in the body," I am yet "present in spirit." If I cannot meet you face to face, to receive your hearty welcome, I can at least implore the choicest of Heaven's blessings to rest upon lives consecrated and faithful to trusts of professional duty, and also upon your alumni associations.

Yours very faithfully,
LEWIS DARLING, JR., M. D.
Class of 1865-66.

BROOKLYN, March 17, 1876.

Dr. W. F. Breakey.

DEAR FRIEND—Your note of the 14th has just been received. I wish that circumstances would permit of my presence at the alumni meeting of the 28th, but there is "an anu.," that keeps me here, in which a hundred or more ambitious students are interested, so that I can merely send a greeting by letter. A few years ago it was a matter of pride with me to mention my *alma mater*. As it is now, my feelings in that respect are somewhat mixed. If it was prudent or would be of any use, I would be glad to make a full expression of my sentiments. The present homeopathic complication I consider to be a natural outgrowth of a spirit which prevailed in the management of the school even fifteen years ago, and which my own inexperienced eyes could not fail to recognize even then. The question has been for years before the managers of the medical department of the Michigan University, whether that school should be a *great* one or a *large* one. The latter has been chosen apparently as the main thing to be striven for, and as a consequence that school which, from its peculiar organization, might have been and ought to have been the leader in every reform for the advancement of the standard of medical education in this country, is beginning to become a by-word and a reproach. Any movement which shall have as its aim a revival or an inauguration of higher standards of professional work, tone and dignity in the medical department of the University of Michigan, will be welcomed by me.

Sincerely yours,

LEWIS S. PILCHER.

HORNELLSVILLE, N. Y., March 25, 1876.

W. F. Breakey, M. D., Secretary of Medical Alumni of Medical Department, Michigan University.

DEAR SIR—Your circular of the 6th inst. came to hand, and the answer delayed until now, thinking I would be able to meet with the Medical Alumni Association on the 29th, but circumstances will render it impossible. Therefore, I can only send my good will, and promise coöperation with the association in all it may deem proper to dictate or recommend for the honor of our cherished *mater* and her sons. We cannot but feel chagrined, after years of earnest toil for the good of our race in the practice of a profession, both philanthropic and scientific, to have forced upon us homeopathy, the apt associate of spiritualism and table-turning.

Very respectfully,

J. S. JAMISON.

GRAND RAPIDS, March 25, 1876.

Dr. Breakey, Secretary Medical Alumni, University of Michigan.

DEAR DOCTOR—At the meeting of the State society here four years ago, I read an article showing the action homeopaths, not only in this State but universally, were taking to establish homeopathy in the University of Michigan. I there urged the immediate and consolidated action of the profession against it. I was informed by some that "my fears were without the least foundation," others said, "Don't agitate the question; it will only make it worse;" another rose and moved "that the doctor be thanked for his article, but it was *impolitic* to have it appear on the minutes of the society." Thus the subject was dismissed, and after spending three days in deciding that a doctor's card should read simply, "Dr. John Doe," be printed on 2x4 cardboard, in long primer type, lest some youthful aspirant should get his "light from under the bushel," our venerable Rip Van Winkles adjourned to take another nap. After a four years' sleep, they now awake and find the homeopathic "crow" on their breakfast table, while rubbing their eyes, they try to console one another, claiming, "It ain't such bad diet" if well washed down with "*Elixir Pro.*" There seems to be some of us who cannot stomach the pill, sugar-coat it however much you may. I loved and revered my alma mater as only a true son can his parent, and to see my mother married to my father's (science) most bitter enemy, and traduced, is a disgrace hard to bear; to such an unhallowed alliance I can never give my assent. Rather had I followed her to her grave than see her thus dishonored. Can a *divorce* be obtained? I earnestly hope it may. Although Chicago and the lawyers can so easily part "those whom God has joined together," I fear 'twill be hard to separate those whom the *devil* has connected. Is there no danger of this union leaving a syphilitic taint? Can a prescription be given so that no traces of the poison be left? I trust the medical skill present on this occasion can produce a cure; at least, I hope they will spare no means to rid her of the vampire who is fattening upon her life blood.

Homeopathy can be likened to a vine which cannot raise itself by its own strength, but is blown hither and thither, 'till at length it catches hold of the bark of some sturdy forest tree, and under its shade and prop the stripling raises high its head, and those who only look at appearances might prefer it to the rough, shaggy coat of its neighbor, on whose unresisting sides it has raised itself to prominence, but when the storms of trial come, it looses its hold on its sturdy companion, it falls to the ground, the sport of the winds, and to be trodden under foot by the passers by, while the old oak, with its roots deeply imbedded in the strong soil of truth, spreads out its sheltering branches far and wide, and with-stands the storms of a thousand years. I look on homeopathy as a speculative theory, which, like many others, past and present, can be made sufficiently plausible to its followers and supporters, but can not stand the light of practical reason and science. That it has not strength and bottom enough to stand alone is illustrated daily by its professed practitioners in their resorting to our medicines, in our doses, contrary to the principle *similia similibus curantur* and infinitesimal doses. Such hypocrisy is detestable, say nothing of the imposition practiced on their deluded patients. Then they barefacedly appropriate our text-books, medical works, journals, etc., call on us for consultation, and now demand our medical department of the University of Michigan to educate them—desire to be placed on our medical boards, and have us recognize them on a par with ourselves. Giving such men instruction is like placing the most improved fire-arms in the hands of the Indians to turn around and use on us. As honor should be valued higher than life, so professional honor should be kept scrupulously guarded and untarnished. No greed for wealth or fear of loss of popularity should make us compromise it.

Now the "horse is stolen, it seems late to lock the barn," but there is an adage which says, "better late than never." It would be better to cut off all State support from the medical department, than that homeopathy should climb up on us there. Those of our profession that argue that educating homeopaths is going to remedy the evil are laboring under a delusion, for if they take the trouble to examine, they will find that the homeopaths who have the largest practice and best success are renegades from our profession, thus prostituting the knowledge obtained from us, homeopathy receiving credit to which she has no due, while their duped patients are swallowing our medicines in wholesale doses, imagining it homeopathic. For them to receive instruction from our professors in anatomy, chemistry, etc., gives them a standing which cannot be controverted, and will give weight to their false theory, and enable them to do greater mischief.

There is no place in the State where homeopathy has as large support as in the city of Grand Rapids, and here the "non-opposition" policy has been well carried out, our older physicians setting the example, which has been followed by later comers, of consulting with and aiding irregulars. This arrangement has lowered the standing of the regular profession, while homeopaths have been the gainers. They use our treatment more than their own, yet claim to their patients to be *strictly homeopathic*. It is hard for the young man to keep his skirts clean under such circumstances, while he is struggling to keep the "wolf from his door," for to stem the tide alone is to make himself unpopular. It is useless for one or two to put their shoulders to the wheel, but what is needed is for the whole profession, to a man, to rise up and meet the question fairly and squarely, and dispose of it, cutting these leeches completely aloof from us, exposing their imposition and hypocrisy, and showing the people what scientific medicine is, and how to detect the spurious from the true.

I am not to be understood as advocating persecution of homeopaths, or choking off the people from employing them, for I am strongly opposed to any such measures. This is a free country, and I believe in people employing just whom they choose, but I most emphatically object to these fellows hanging on to our coat tails, as they have done and are trying to do, and when they try to quack it with our medicines, etc., steal our knowledge and try to palm it off as homeopathic, it is high time that their tow lines were cut.

Hoping the association will be a pleasant and profitable one, I close with the following toast:

Here's to our dear old alma mater's health,
And each alumnus brother's:
May Providence on one bestow his wealth,
And grant success the others.

E. W. HUME.

COLOMA, March 24, 1876.

DEAR DOCTOR—Although I should very much like to be with you the 28th, I am sorry to say it will be impossible for me to do so. More especially shall I feel disappointed if my presence there would be of any material benefit to the association in the endeavor to rectify that which I consider a great oversight in the authorities concerned in establishing homœopathy in the University. And there could be to me no greater gratification than to know that this, what I designate as not only a gross injury to the University and insult to its medical alumni, but, in compelling our much loved "alma mater" to mother and uphold such transparent quackery, is a most despicable *imposition* upon the medical world.

There is a great deal upon this subject that occurs to my mind, but I think I have said enough for *you* to understand how I feel and how I regard the attendance of students at the *medical department* as it now is. There is no *honor* in receiving a *diploma* therefrom, and as long as the complication remains, I shall never advise a student to attend the U. M.

Yours,

W. RYNO.

NORTHAMPTON, MASS., March 20, 1876.

Dr. W. F. Breakey:

MY DEAR SIR—Your notice of an alumni association having been organized at the last commencement of the medical college is received. I shall be glad to have my name enrolled upon the list as a member of the class of '69, and yet there is bitterness in the cup, for in view of the recent action of the Faculty in affiliating with homœopathy, no graduate can henceforth regard his alma mater as a true "fostering mother." She has betrayed them all and deserves their severest censure and condemnation. What a spectacle she presents to the world! a *mongrel* medical department! teaching at one and the same time science and quackery; inculcating in the same breath wisdom and charlatanism, with the endorsement that one is as good as the other.

If the medical college is still looking to her old graduates to send back their students to fill future classes, she will be sorely disappointed. The profession at large will not display such an abject servility to the dogma of Hahnemann as the present medical faculty of the University of Mich.

I wish to put forth for the faculty a suggestion. It is this, that upon the cover of the annual catalogue hereafter be exhibited the significant cartoon of our distracted alma mater standing upon two legs, one well-developed and firmly planted upon the rock of science, the other of the grass-hopper style, attenuated to accord with homœopathic principles and standing in the thirtieth dilution. Motto, "You pays your monish, you takes your choice."

Yours very truly,

C. SEYMOUR.

CORNING, N. Y., March 25, 1876.

W. F. Breakey, M. D., Sec'y Alumni Association, Ann Arbor:

SIR—Your circular announcing the approaching gathering of the alumni of our alma mater was duly received. I am much pleased to know that such an organization has at last been effected. I wish to be regarded as among its *active* members, and if circumstances favor to meet with you a year hence. To attend "commencement" once more at the University has been a pleasure I long have promised myself. The pleasure will be doubly enhanced by joining in the festivities of your annual alumni gathering after the varying experience of twenty-one years of constant practice.

I have not been an indifferent spectator to the persistent efforts to engraft the dogma of homœopathy upon the curriculum of study pursued at the medical department of the University of Michigan, and I can only hope that the fair fame and future usefulness of the institution will not be marred by the final success of the attempt.

Hoping for the permanency and usefulness of the association, and wishing you all much enjoyment at the approaching social gathering,

I have the pleasure to remain

Very truly yours,

HENRY C. MAY,

Class of 1856.

PLYMOUTH, MICH., March 3d, 1876.

To Dr. W. F. Breakey, Ann Arbor, Mich.:

DEAR DOCTOR—I have the greatest respect for the members of the faculty of medicine at Ann Arbor, especially those who were my teachers. I graduated March 27, 1867, and feel a deep interest in my alma mater, but rather than yield to the dogmas of any exclusive system of medicine I would see her totally annihilated. And do we not in a greater or less degree yield to homœopathy by having the system taught, as it is, in connection with rational medicine, in the University?

Yours,

R. HAINES.

MONTGOMERY, MICH., March 20, 1876.

To W. F. Breakey, M. D., Ann Arbor, Mich.:

DEAR DOCTOR—You will confer a favor to me by adding my name to the roll of members of the medical alumni association of the University of Michigan.

Respectfully yours,

JOHN W. MERRY,

Class of 1869.

To the Alumni:

To cherish the homœopathic parasite will prove a great mistake.

Give them (the homœopaths) a full faculty, and let them prove their value.

A united alumni in the above will crush the homœopathic humbug.

Respectfully yours,

J. W. M.

OXFORD, CHENANGO, CO., N. Y., March 27, 1876.

Dr. W. F. Breakey, Sec'y Med. Alumni Association of the University of Mich.:

MY DEAR DOCTOR—Your circular is before me, and I most cheerfully authorize you to attach my name to the constitution and by-laws. I am sorry not to be able to attend the meeting of the association, but shall endeavor to be present in 1877 and make my first visit to the University since the date of my graduation in 1857, nineteen years ago.

My class will undoubtedly be but feebly represented, but it will be gratifying to meet even a few familiar faces—at least those that used to be familiar when students—but now most of them gray haired men of mature years, who stand as sentries watching with jealous anxiety the threatened honor of our esteemed alma mater, hoping to see it emerge from its trials unscathed and accepted as the model school of America. Success to the alumni association.

Yours respectfully,
S. F. McFARLAND.
Class of 1857.

TOLEDO, O., March 23, 1876.

W. F. Breakey, M. D., Sec'y Alumni Ass'n, Med. Dep't University of Mich.:

DEAR SIR—Believing that a duty is incumbent upon those who have already graduated in the medical department of the University, we desire, through you, to express to her alumni association our views in regard to the introduction of homœopathy into that institution.

We, in common with many others, have always referred with pride to the diploma received from the regents of the University, and with corresponding pleasure to the "honored faculty" that in those days wrote thereon their names and titles. This evidence of our professional ability, we held to be both "armor and shield." We have watched with eagerness the development of the medical department of the University, and her immense power for good in the profession. Her honors were measurably our own, and having shared her glory, in an evil day we must likewise bear a portion of her shame. Our hearts have been bound in bonds of love to her, as well as in duty to the profession to which her gift wedded us. We could, in the fullness of our hearts, forgive much in our alma mater. But the principles of our profession dictate that love shall never interfere with duty. Our relation to this question is totally non-partisan and void of all personal feeling. We are free from the local influences that bear upon many others, and care nothing for the adroit logic and language with which it is attempted to cover the startling fact, that a pretended system of medicine, a system which we were then taught to believe and now conscientiously hold to be, the most arrant attempt at humbuggery, is engrafted upon the institution.

We shudder at the fact that a faculty in part composed of those whose names appear upon our diplomas, now join hands with those who teach this unblushing charlatanism, by freely giving their students the benefit of additional instruction, thus becoming an organized corps of colaborers in preparing them to practice a pretended system that not only shames science, but is a byword to simple common sense When the advocates of "similia similibus curantur," and the law that the less the dose of a given drug the more powerful it proves to be, flaunt in our faces their diplomas, bearing the same names and seal as our own, we can but estimate the value of ours, obtained when her name was without stain, as very sadly depreciated. Words of reproach we have none, and our sentiments are only those of sorrow. Our alma mater is smitten with a loathsome disease. We hope that its fatality may be averted, and to this end respectfully express our belief and feelings, that the alliance should not be continued, that at all hazards the purity of medical teaching should be there maintained; that, come the very worst, we enter our earnest and solemn protest against the teaching of homœopathy, or even its tacit recognition in the medical department of the University of Michigan.

Very respectfully, &c.,

(Signed) J. T. WOODS, M. D., Class of 1855.
GEO. W. BOWEN, M. D., Class of 1860.
J. F. ARIS, M. D., Class of 1865.
JAS. A. DUNCAN, M. D., Class of 1871.
EDWARD M. HALL, M. D., Class of 1873.
JAS. T. LAWLESS, M. D., Class of 1872.
A. J. BOSTATER, M. D., Class of 1871.
C. R. HUME, M. D., Class of 1874.

***** The following gentlemen have assented to the foregoing statement since the alumni meeting.

H. A. CLELAND, M. D., Class of 1861.
PROF. WM. PLANT, M. D., Class of 1860.
L. J. CARPENTER, M. D., Class of 1871.
B. HANKS, M. D.
WM. BROWNELL, M. D., Class of 1852.
P. A. KNIGHT, M. D., Class of 1854.
W. C. WEST, M. D., Class of 1860.
J. S. POWER, M. D.
G. W. REMAGE, M. D., Class of 1863.

DR. WOODS, of Toledo, says that to date of writing, April 22d, he has learned of only one graduate who did not endorse the foregoing.

Correspondence.

LETTER FROM JACKSON, MICH.

IT is useless for those who are in accord with the faculty to endeavor to conceal the fact that the opposition are attempting to make things sultry for us, and if they persist, will ultimately create some confusion in the ranks of the profession. They even seem desirous of carrying the war into Ethiopia, with the intention of robbing us of our homeopathic Senegambian which is supposed to be sequestered within the University enclosure.

They seem to consider the faculty much in the position of a lion with an oyster can tied to his tail. Whenever he moves there is a fearful racket, and if he remains quiet there is still the tie that binds the little homeopathic appendage to his quivering caudal extremity. And farther, they blame the faculty lion for not showing proper resentment at this proffered insult, in which event it is claimed that the tail would not have remained quiet sufficiently long to allow anything to be fastened to it.

They imagine that there was collusion by, certain leading spirits of the University and Board of Regents, with certain committee-men in the last Legislature, for the purpose of allowing the University arm to be thrust deeper into the State treasury, and that the "plan" by which homeopathy was grafted upon the institution owes whatever of merit or demerit it has entirely to the regents and the faculty. That, as it doesn't take long to learn nothing, the homeopaths didn't require very much instruction.

That the motives which induce the faculty to remain and suffer martyrdom are not all included in the famous "statement," but that there are something like two thousand other reasons why they are content to be pilloried for six months of the year in a connection that they must abhor. That the idea of belittling the profession into educating those one-idead fanatics up to the standard, and thus exhibiting to a gaping world the triumphs of science, is like trying to tame a skunk, with the probability that in the end the tamer will be the most docile of the two, and smell a deal the worst. That certain of the regents, at least, have either betrayed confidence or yielded to imaginary foes.

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* The Toledo alumni circulated their protest among other alumni since the meeting, and request that these additional names be inserted here. Their position in this place is a matter of convenience, without Dr. Breakey's authority.

And, finally, that the mills of the gods, which, though they grind slow, will, unless these men leap from the hopper, ultimately pulverize them into such an impalpable condition that Hahnemann himself would consider them altogether too finely attenuated for usefulness.

Thus these men argue, and although their objections have been repeatedly answered, they are like Banquo's ghost, they wont "down." I certainly wish they would, and that the chasm could be bridged so that any one could pass over—even homeopaths, who seem to be traveling on the ragged edge.

At the late alumni meeting there was much bad blood exhibited on the part of the older alumni, who were decidedly impertinent in their demand for a hearing. The faculty were anxious for a full and free expression, and were willing to accept any solution of the vexed question, provided it contained nothing derogatory to their position as the true censors of the profession, which, by the way, was very right. The graduating class subscribed to the constitution and became members, after having all doubt as to their eligibility explained away by regent Rynd, who afterwards made a speech which cleared the atmosphere, and exculpated everybody from any blame for homeopathy being in the University. The fact is that Legislature is at fault. Brain food for that body is the only hope of the University. They should be fed on fish. The committee on resolutions overdid the affair, but the moment it was discovered that their report was distasteful to the faculty, it was instantly tabled by its friends, which, on the whole, was a fortunate thing.

Now it is true that the faculty are not a unit as to whether they are responsible for graduating homeopathic students or not, but there are a great many mooted points in medicine. (I have seen grave differences arise between members of the faculty as to the effect that alkali has on blue litmus.) And in respect to those celebrated resolutions passed by the students, it is probably true that there were but few present, but whether there was one or two dozen who acted upon them makes no difference. They represented the class, and which one of the faculty drafted them has nothing to do with their passage. It is enough to know that they were passed *unanimously*.

Further, whether it is more like a bargain and sale to stay and draw salary than it would have been to enter into an arrangement with the regents, by which this alliance could have been avoided, is a matter for the faculty to decide amongst themselves, and it is wrong for the older alumni to worry and disturb them in the manner that was attempted at the late meeting. The idea that the faculty should be denied control of that meeting, and, if they chose, of holding the recent graduates as a reserve corps, is preposterous, and in any event, it is very bad taste to criticise their actions. Be patient, gentlemen, and before the dawning of another centennial year you will behold a united profession. Then the regular lion and the little homeopathic lamb shall lie down together, and an eclectic child shall feed them, and there will be nothing to hurt or destroy, for the lamb will be inside of the lion, and the child will be giving him herb tea to allay intestinal irritation.

E. B. WARD.

JACKSON, April 18, 1876.

THOUGHTS SUGGESTED BY THE RECENT ALUMNI MEETING.

Editors Detroit Review of Medicine and Pharmacy.

An impartial observer attending the "faculty meeting," called by courtesy "Medical Alumni Association," at Ann Arbor, on the 28th ult., must have been struck with many salient points of the exhibition. As such I would like to record a few of them as they struck me, although I cannot give them in the order of their occurrence, as there was so much informal discussion and proceedings clearly out of order, and withal, the meeting was so lengthy.

And here I am reminded of how much of the time the members of the faculty (several of whom are only honorary members) consumed in the discussions, on matters, too, which delicacy ought to have compelled them to leave to other members of the association. It was quite affecting to note the righteous indignation the gentlemen of the faculty manifested about the "insult" which they said had been offered to their class, in what they insisted was an attempt to exclude them from their rights as members of the association. Dr. Frothingham, in his scandalous abuse of the executive committee for its report, forgot, however, when he said that "there was not a word in the meeting of organization in 1875, about the class not being graduates," his toast of that year, "*the class of* '’75 '—*the babe unborn.*"

The faculty considered this year that the babe was born, since it issued a certificate to that effect in the morning. It was the general opinion amongst the other medical gentlemen present, that an effort had been made to induce "premature labor" by the faculty, and then to insist that the offspring was matured, which it did with all the interested zeal of the parties who wanted the marriage certificate "dated back." I may note in this relation that the graduating class numbered seventy-seven. There were also present at the meeting six of the faculty, and only about fifty of the older alumni.

I spoke of Dr. Frothingham's scandalous abuse of the executive committee. He used language on that occasion most unbecoming a grave professor; he ranted, and bellowed and walked around, shaking his fist in Dr. Breakey's face, and finally began a tirade of abuse against Dr. Sager, which he was permitted to continue by the president, Dr. Mulheron, until called to order by members of the association.

The rulings of the president were, to say the least, peculiar. For instance, I could not see the justice of permitting Dr. Rynd to air himself in a long talk to no question, though called to order by Dr. Twiss, but calling Twiss to order when he attempted to reply to Rynd; or in requesting Frothingham to appoint both the committees; in declining to order another vote when requested by those who thought there was an error in the count, which he ruled a tie, in a vote in which I noticed neither member of the committee voted (an example of modesty wasted on the faculty).

And finally, at the supper, talking against time on a volunteer toast, when by a formal vote the letters from absent alumni were to be read at the supper, and adjourning the Association *without an allusion to the letters.*

It was amusing to me to hear Dr. Maclean's proposition (and he an honorary member, too) to restrain the class from interfering in any way" when he demanded a "fair, free and honest discussion" by the older alumni of the propositions contained in his "informal letter," as if the class was there to be manipulated as best suited Dr. Maclean's purposes—an insult, I take it, to its intelligence, independence and honesty. His belief, also, simple man, that "the faculty as a whole earnestly desire to act in concert with the alumni, and that it looked to this society for advice in the present emergency." What superhuman efforts he made to get a hearing to the advice the faculty so much wanted, from the alumni present and to the letters of advice from those absent, was simply wonderful, and stamped Dr. Maclean as a very miracle of consistency.

Dr. Dunster, too, another honorary member, who repudiated the spirit of Maclean's letter by objecting to the advice as soon as presented in resolutions, on the ground that its acceptance would be "an open bargain and sale." Yet he and his colleagues of the faculty placidly remain and draw their salaries in an arrangement making them practically colleagues of homeopathists in what is considered pretty generally a "bargain and sale" that was "*not open.*"

How could this gentleman be so cruel as to admit, which he did in the hearing of several gentlemen, during a recess in the business of the meeting, in a discussion with Dr. Twiss, that "*the faculty was responsible for the graduation of homeopaths?*" And this, too, in the face of Dean Palmer's "statement *in behalf* of the faculty!" The consternation of the worthy dean and the open-mouthed astonishment of the students, many of whom had gathered round, at this announcement, is not surprising. What a happy, unanimous family the faculty must be! Some of its members, however, while making great pretensions to liberality, consistency and honor, are quite anxious to receive the benefit of "private denial of public wrongs." What now, let me ask, becomes of their resolutions in support of the impregnable position of the faculty, when some of the staff are already deserting?

The fulfilment of Dr. Dunster's promise to "define his position" at the State Society meeting may be looked forward to with interest. The profession will doubtless be agreed that it is quite time it was done somewhere else than in the newspapers. It is quite improbable that the profession will now be diverted from the real issues of this grave question by the petty affairs of newspaper cards and appeals to the public.

Why honorary members, who appear or speak in an association only by courtesy, should consider any part of the proceedings of its real members—for which they are in no wise responsible, nor obliged to stay and hear—a sufficient "provocation" to indulge in profanity and such "ungentlemanly language" that his colleague has to advertise himself in the newspapers by telling what he "*did not hear*" (!) about it, will doubtless be set down by the professional reader to the "innate stupidity" confessed in another newspaper card of similar import.

No one not ready to confess to "innate stupidity" would think there could be great danger from the acts of a committee, that could be approved or undone by the power appointing it. The claim of "precedents" and "usage" comes with an ill grace from a faculty in open alliance with charlatanism, for which neither "precedent" nor "usage" can be found in the country, and in defiance of professional sentiment the world over.

These artifices may serve to make students and recent graduates think themselves competent to instruct the profession and obtain cheap notoriety for the writers among their friends in Ann Arbor, but the State of Michigan is large, and the recognized sentiment of the profession on these points is not bounded by territorial limits. And if this is the best defense they can make, it is indeed lamentable.

Whether it is fitting the dignity and character of a great University the profession will judge for itself. But the gentlemen of the faculty might profitably consider that the profession at large will be more likely to look at these petty exhibitions as a desire to evade or an incapacity to grapple with the real issues involved.

Whether the professed desire of the faculty to obtain an expression of opinion of the older alumni was demonstrated by the conduct of those who represented it at the meeting, we think those present had no difficulty in determining for themselves. Whether the rulings (!) and method of appointing committees was creditable to the presiding officer and a permanent help to the association, we think was also pretty well determined.

And we risk nothing in expressing the opinion, so prevalent at the close of the meeting, that a very large majority of the older alumni in attendance went away in sorrow, humiliation and disgust, feeling that the *alma mater*, already sufficiently disgraced, had suffered additional injury at the hands of its professed friends and appointed defenders; and to find themselves, by no act of theirs, beyond remaining true to professional honor—where one year ago the faculty was with them—now in antagonism to the position of the faculty, through their own adherence to the settled principles of the profession, learned in former years at the University, and accepted everywhere as the standard of professional conduct.

Time was when the strength of the old college and its faculty inhered in the justice and righteousness of their position, and did not require efforts more befitting the blatant rantings of the demagogue and the newspaper advertising of the quack to bolster it up. The older alumni and the friends of the *alma mater* might well wish that time returned.

DR. H. A. CLELAND,
22 State street, Detroit, Mich.

LETTER FROM ONE WHO WANTS TO PLACE HIMSELF "RIGHT UPON THE RECORD."

YORK, WASHTENAW CO., MICH., April 12, 1876.

To the Editors of the Detroit Review of Medicine and Pharmacy:

In asking a place in the REVIEW for a few remarks on the still vexed homeopathic question, I desire to state that I approach the subject with great reluctance, and more from a sense of duty and a desire to put myself "right upon the record," than from an expectation of saying anything new upon a topic which has already been so ably discussed.

And I wish to say further that if the doctrine somewhat vaguely enunciated—by one member of the faculty, at least—is to be accepted as proper and just, viz., that those of the profession who are under special obligations to the faculty, or have received marked favors at their hands, should modestly refrain from criticising their conduct or position, then, indeed, I have no right to speak upon this subject at all; for I number them all among my most valued personal friends, and their many acts of kindness—particularly of some of the older members of the faculty—are here freely acknowledged, and will always be remembered with feelings of the deepest gratitude. That the faculty seriously hold their friendship conditional upon such an utter abasement of manhood, and recreancy to a sense of duty, I can never believe. And if, in expressing my honest convictions upon this subject, I shall incur the anathema already fulminated against those who shall "hereafter" call in question any of the statements of the faculty, I shall be sorry, and can only express my regret that those statements should not be capable of a better defense by argument than by intimidation.

And I here wish to disclaim for myself, in advance, and for those who have written before me, any intention or desire to cripple or "destroy the most successful school of medicine in the Northwest." Why this imputation against the motives of all those who have hitherto expressed themselves in opposition to the present "complication" has been so persistently urged and reiterated, not only in the medical journals, but in many (evidently faculty-inspired) editorials of the secular press, it is difficult to say, unless it be an effort on the part of the faculty to show the medical department, and through it themselves, as the victims of a cruel and relentless persecution—a sort of bid for that popular sympathy which is always accorded to the oppressed and weaker party. The great majority of those who have spoken so forcibly and so earnestly against the present "state of things existing," are graduates of the medical department of the University, and it is ungenerous, as well as unjust, to impute to them any less worthy motive than springs from an earnest desire to see their *alma mater* restored to all her former purity and glory. In her downfall they have nothing to gain, but everything to lose. In her glory and purity they are honored and exalted, while in her degradation they cannot fail to share her humiliation and disgrace. And so long as there is a reasonable hope of her restoration, they will patiently labor and cheerfully wait; but when there is no longer any, they will be justified, we think, if they rise up and disown her. If the medical school is ever destroyed, it will be by the rough-hewing and meddlesome interference of the Legislature and Board of Regents, making it, as many think they have already done, a thing unworthy of professional countenance or support.

From the various statements made by different members of the faculty we gather the following prominent points, which they seek to establish:

1. That none of the professors in the old school are "members of the faculty of the homeopathic college."
2. That the two colleges or schools of medicine are entirely separate, distinct and "independent" of each other.
3. That "the faculty have no responsibility whatever in sending forth homeopathic students" (graduates?)
4. That in the present arrangement the faculty are guilty of "no professional association with homeopaths or homeopathy."

5. That by this arrangement there is to be a free discussion of homeopathy, and a full opportunity given to refute its errors and expose its follies.

Notwithstanding each and all the above propositions have already been well and ably shown to be erroneous and indefensible, still a few remarks upon the same subject from one of the older alumni may not be entirely superfluous or out of place.

With regard to the assertion that a portion of the faculty of the college of medicine and surgery are not members of the homeopathic faculty, it has been admitted, and we admit, that it may be technically true, but that they are *virtual* members of that faculty can not be denied. Let us call an impartial witness:

> "*Faculty*—In colleges, the masters and professors of the several sciences."—*Webster.*
>
> "*Professor*—One that publicly teaches any science or branch of learning—*particularly* an officer in a university whose business it is to read lectures, or instruct students in a particular branch of learning."—*Ibid.*

Now, if "it is the business" of Prof. Maclean to "read lectures" to the students of the homeopathic college and "instruct" them in the science and art of surgery, is he not to all intents and purposes, and according to the best use of language, their professor of surgery in that institution? And so, also, respectively of the other five. And if professors or teachers in that institution, then in every important sense they must be considered members of its faculty. The mere technical quibble that they never meet the rest of the homeopathic faculty in "joint sessions," has nothing whatever to do with the true merits of the case.

The office of teacher in all our higher institutions of learning has long been designated by the title of "professor," and it is now never omitted except through carelessness or intentional disrespect. And the corps of teachers in such institutions, taken collectively, has, by universal usage, come to be known and designated as its "faculty." This is too well known and self-evident to admit of argument. Why, then, this evident disinclination on the part of the faculty to bear the proper title of an office which they evidently fill? If it were an honor, would it not be eagerly claimed and strenuously insisted on? Why not, in the annual announcements of the homeopathic college, swell the list of its professors to something like respectable proportions by inserting the names of those really, as well as of those avowedly such? The reason is obvious. *Without changing their relations to that institution in the least*, such publication would at a glance show those relations so plainly and clearly "that he who runs might read." And, as bearing upon this subject, we may be permitted to state that we are quite sure that in the earlier years of the University, the students of chemistry in the department of literature, science and arts, "had the privilege" of attending lectures, and received their only instruction in that branch in the medical department and in the medical building. The name of Prof. Douglas *then* figured prominently as one of the faculty of the Department of Literature, Science and the Arts, as it perhaps does now. If it had been intentionally omitted for ulterior purposes would he have been any the less a member of its faculty? We believe it was never so omitted. And we don't believe that he would have been particularly gratified if it had been.

The assertion that the homeopathic college is as distinct from and independent of the regular Medical College "as the Law School is distinct from the Department of Literature, Science and the Arts," is worthy of consideration chiefly from the high source whence it emanated. Though nominally distinct and independent "in its organization," it is not at all so in its operation, and the homeopathic school is no more independent of the regular Medical College than is the mistletoe independent of the sturdy oak upon which it has fastened its parasitic hold. Would the Law School be entirely distinct and independent if, requiring the services of eight full professors, it had to depend entirely upon the Department of Literature, Science and the Arts for *six* of them? How can it be shown that the homeopathic school in like circumstances is separate and independent of the regular branch? Suppose that the entire regular medical faculty resign, or—to be more within the bounds of probability—that an earthquake swallow them up. Can the Homeopathic School go on without them? It ought to, certainly, if it were an "independent" institution.

The faculty strongly disclaim any responsibility for the graduation and sending forth of homeopathic doctors, and in proof of their irresponsibility adduce the facts, among others, that they do not sign the diplomas of the homeopathic graduates, and do not recommend homeopathic students for graduation. With regard to these statements, it has lately been claimed that they are both "literally, strictly and exactly true," and that the inference that the faculty were to sign and recommend as heretofore, is "not a necessary inference." Will the author of the "personal statement" please inform us what inference he *intended* should be drawn from these statements, or what other, under the circumstances, is possible? He knew that heretofore the faculty had always signed the diplomas of regular graduates. He also knew that they had always recommended for graduation. He also knew full well that the entire profession abroad, and the great bulk of it at home, were in utter ignorance of the fact that there had been any change of rule in this respect. Under these circumstances, it seems impossible that he should not have known that the most obvious and natural, if not "necessary" inference would be a false one. By what strained interpretation or perversion of language is it possible to draw any other? Why did not the author of the original statement give us at the same time the other "half the truth"—that the faculty were no longer permitted to sign diplomas or recommend for graduation? Simply, we think, because that would have taken all point and meaning out of the partial statement which he *did* make. What possible sense, meaning or application have these statements except by implication? That they have no other we think is evident from the fact that in the late personal statement its author vouchsafes no other explanation and suggests no other inference than that drawn by his critics, though afforded the best possible opportunity. But we are informed that "members of the Board of Regents have expressed their entire willingness that the names of the faculty should be placed upon the parchments, and it is expected that they will be so placed." We have heard this before, and are heartily sick of it. If "members of the Board of Regents," with a deliberate enactment of their own standing unrepealed today, have deliberately connived at, or countenanced such an undignified and willful evasion of its provisions, then we can only say that such duplicity shows them to be strangely wanting in all those sentiments of manliness and honor which should characterize men in their position. Would the ethical relations of the faculty to homeopathy be changed in the least, or their agency in, and responsibility for the graduation of homeopathic students be increased in the smallest degree, were they to recommend them for graduation, sign their diplomas, or even lecture to them by themselves in the homeopathic "building?" We think not.

We understand the faculty to say that they "do not deny any responsibility which such teaching involves." Well, since they freely assume the responsibility for the teaching of homeopathic students, and as the teaching of them "involves" their graduation, and as their graduation "involves" the "sending them forth," we don't see but that they have unwittingly shouldered pretty much the whole of it. Moreover, the point so frequently and forcibly urged, that three-fourths of the regular faculty have just the same agency and responsibility in educating and graduating homeopathic students that they have in educating and graduating regular ones, has never been answered, and, we venture to affirm, is unanswerable.

A few eliminations and substitutions, as the mathematicians say, may help to a better understanding of the relations which a portion of the regular faculty sustain to the homeopathic school, and of the relations which the two schools sustain to each other. Suppose that that portion of the faculty common to both schools be so changed—which any meddlesome Legislature or complaisant Board of Regents is liable at any time to do—that it shall become either partly or wholly filled by homeopaths; would there then be any difference in the relation which the two schools sustain to each other, supposing them, of course, to be "entirely separate, distinct and independent" now? Again, suppose that the class of regular students should go on steadily diminishing till not one be left, or that in a body they transfer their patronage to some other institution—the homeopathic class alone remaining; what relation would this portion of the faculty then sustain to the College of Homeopathy? We leave this question to be answered by the faculty themselves, only assuming, what cannot be denied, that whatever relation they *would* sustain to it in such case, *they do sustain to it now.*

But the most serious charge, and the point upon which the faculty seem to be most sensitive, is that by the present arrangement they are guilty of "professional association" with homeopaths. This, we think, can be fully proved. In the first place, it must be conceded that the teaching of the science of medicine is as clearly one of the legitimate pursuits of the profession as is the practice of it. Consequently, if the faculty and the homeopaths are co-educators or laborers in the business of making homeopathic graduates, they may be as properly and as truly deemed to be "professionally" associated as they would be if consulting together at the bedside of a dying patient. Will the faculty tell us that for a regular physician to join with a homeopath (skilled, perhaps, in his art by Prof. Dunster himself) in an effort to save the life of a woman in the hour of her mortal peril and agony, is unprofessional and reprehensible, while an association having for its object the evolution of just such another homeopath, is honorable and praiseworthy? There is in the hearts of the profession everywhere a sentiment of humanity which will compel them to judge leniently, if they do not applaud the "ethical delinquency" in the former case; while for that in the latter, there can be no possible palliation or excuse. If professional men, working together in a common cause and for a common end, does not constitute professional affiliation or association, what does?

The pretense that in the present arrangement there is to be free speech, and a full and free opportunity afforded to refute the errors and expose the follies of homeopathy, has already been so thoroughly ventilated and exposed that it would not be referred to here were it not for the fact that it seems to have been made the means of obtaining that quasi endorsement or approval of their course which the faculty seem to have obtained from several most eminent and distinguished men. We very much wish that the author of the faculty statement had addressed to Prof. Flint a letter somewhat like the following:

"DEAR DOCTOR—I remember in a conversation with you some two years ago that you said you thought we should advance the cause of medical science by admitting the homeopaths to the University, where there would be an opportunity of meeting them and showing their weakness and absurdity. I felt the force of your statement, but am sorry to inform you that though the homeopaths have been admitted to the University, there is to be no free discussion, and consequently no opportunity of exposing their follies or of showing their "weakness and absurdity." Their students are not to be allowed even the poor privilege of silently comparing the merits of the two systems, as the lectures upon the distinctive topics of each have been designedly so arranged that they cannot possibly hear both sides. Even so long ago as 1868, the writer of this was forbidden by the Board of Regents to deliver a course of lectures exposing homeopathy, to the students, either on the University grounds or elsewhere. I am not aware that their action has been repealed, or that the present Board entertain any more liberal views than the one of that year. So you see there can be no free speech—no free discussion. More than all this, the most of us are made virtual members of the homeopathic faculty. What had we better do?"

Now we submit that the above communication would have been "literally, strictly and exactly true," and would have given a better idea "of the exact state of things existing" than the one that was sent; and to a letter embodying substantially the above statements, there are very many of us who are anxious to know what Prof. Flint's reply would have been.

We are solemnly asked by the faculty to consider what would be the effect of their resigning. We do not know, but we firmly *believe* that, had the faculty resigned, or had they addressed a communication to the Board of Regents, strongly protesting against the present arrangement—and, while consenting to deliver the following course of lectures under such protest, and expressing the hope that the Board would in the end see the folly of the step they had taken—firmly stating, that unless some arrangement be made whereby the faculty might honorably remain, such communication must be considered a tender of their resignations at the close of the lecture term—we say we *believe* the Regents would have found some means to have filled the chairs of Anatomy, Chemistry, Physiology, Surgery, Obstetrics and Ophthalmology in the homeopathic college, which are presumably either *vacant* now, or else *filled* by a portion of the present regular faculty.

The faculty urge that they have manfully resisted the encroachments of homeopathy for the last "twenty years." That this is true we bear most willing and cheerful testimony. But what are we to infer? That they have become, at last, "weary in well doing?" That, after twenty years of undoubted fealty to the profession, its betrayal at last must be considered an innocent and agreeable pastime? We believe there are many in the world who would be glad to plead a long and vigorous resistance, in extenuation of a final and fatal lapse from virtue, yet we are not aware that society regards them any the more leniently for all that. Is not all this very much like the pleading of "extenuating circumstances" in the law, or the proving of "*previous* good character" in the case of the prisoner at the bar?

It has long been a source of wonder on the part of many of the profession, that the faculty should have allowed themselves to be "forced" into "complications which they deplore," and into a position which is equivocal, to say the very least, without making at least a manly and vigorous protest. The reason for this we think is plain. A protest, to have any force or significance, must imply some alternative of action reserved by the protestants in case their protest is disregarded. In the case of the faculty that alternative was plainly their resignation. But since they evidently had *no intention* of resigning, even though the present complications should last indefinitely, the faculty were shrewd enough to see that a standing protest, while they continued serenely to hold their positions year after year, would be justly considered as simply and only a perpetual farce. They had already made themselves liable to censure—they, very sensibly, did not choose also to make themselves ridiculous.

It has been repeatedly stated, in explanation or extenuation of the fact, that the faculty made no sign of dissent from, or protest against the present arrangement, that one or more of its members were in other and distant States. This, we think, is a weak excuse. If the faculty had been willing to submit to the discomforts of a night session, we venture to affirm that they could have obtained from the Western Union, or other telegraph company, the exclusive use of a wire from Maine to Michigan, or from Brooklyn to Ann Arbor, which would have afforded means of instantaneous communication and an opportunity for the fullest consultation and thorough elaboration of a plan of action, and at an expense which, in comparison with the magnitude of the interests involved, must seem utterly paltry and insignificant. Thus each member of the faculty might have been, not merely "constructively," but, to all practical intents and purposes, actually present—at most, not a quarter of a second away. Have the obviously natural and historic uses of the *military* telegraph never occurred to these valiant defenders of the citadel of rational medicine—these men who never propose to be guilty of "treason to the interests of medical science," of "surrendering a stronghold without resistance," or of "fleeing their guns" in this "hand to hand contest?" We don't know what the faculty think of their own generalship, but we feel confident that such marked indecision, and such obvious incapacity to seize upon and utilize such plainly apparent resources, on the part of a Marshal of France of the First Empire would have certainly resulted in the loss of his command, if not of his bâton.

"The University would be given up to the undisputed possession of the homeopaths." Well, rather than the present disreputable arrangement, we say, *let them have it*, a thousand times, since for that state of things the regular profession would have no sort of responsibility whatever. And as "preferring death to dishonor," we say that if our *alma mater* cannot survive with honor unsullied and purity untainted, better by far that she sink into an honored, though untimely grave. And here we expect to be assailed by the imputation already disclaimed at the outset, but we cannot help it. We insist that the real destroyers of the medical department are they who have defiled its altars and opened its portals to profanation. And we here express our deliberate conviction, more than ever strengthened by recent events, that if the principle is to be admitted that the medical department is to be made representative of all the different "isms," "pathies" and systems of medicine abroad in the land—if it is to be understood that just so soon as the votaries of any of these "exclusive dogmas," by any sort of chicanery or political intrigue, can secure the necessary legislative enactments, the Board of Regents will accept and "faithfully carry them out"—if the teaching of one form of truth must necessarily involve and establish a precedent for the teaching of many forms of error, and if there be no longer any hope of restoring the medical department to its former proud and unequivocal position, then we say that the sooner it is discontinued altogether, the better.

There are many valid reasons why a medical department has no proper place in our State University. Does any one seriously think of establishing a theological department, for the training and sending forth of ministers of Gospel, in the university of a State where the adherents of all the different sects and denominations would have an equal right to have their distinctive doctrines taught? Is not a medical department, in precisely like circumstances, equally inconsistent and absurd? In the university of a government having an established church, theology might be properly taught. So, also, if our own State not only frowned upon quackery, but imposed upon it legal restraints and disabilities, it might properly and consistently admit legitimate medicine to be taught in its University. But it does not. And we fear it never will. One form of quackery is just as good as another. And if one form has any intrinsic right to demand its propagation at the expense of the State, all the others have just as much. And the "logical outcome" of all this will be either Bedlam or the Millennium; we don't know which.

From the concluding paragraph of Prof. Palmer's personal statement, as well as from the fifth resolution of the students, in the April number of the REVIEW, it would seem that the faculty, despairing at last of being "sustained by all judicious physicians," are beginning to look to the State Medical Society for "advice and countenance"—for some assistance in extricating themselves from the "strange dilemma" into which they have been forced. And here we must say that the odious tyranny of the Board of Regents, in thus "forcing" these unresisting and helpless men into "complications which they deplore," can never be sufficiently execrated.

We strongly suspect that in looking to the State Society, the faculty are yearning more for "countenance" than "advice;" still, if such advice be sincerely asked, and *coupled with an honest assurance that it will be adopted by them*, we hope that it will be most cheerfully and cordially given, unmixed with censure or reproach. The simple asking of advice would be, to some extent, a tacit admission of a faulty or mistaken course, and should be so taken and accepted.

But if the faculty expect to ask such advice, all the while intending to accept or reject it according as it may agree or disagree with their preconceived purposes or opinions, then we think the Society cannot, with any degree of self-respect, lend itself to the enactment of any such farce.

There are some other points, Messrs. Editors, which we intended to have touched upon, but time and space forbid. For instance, taking the organization of the Dental School as a proper model, we should have been glad to have urged the necessity of instruction in the art of fabricating glass eyes and wooden legs as an indispensable appendage to the chairs, respectively, of Ophthalmology and Surgery. And we would certainly have recommended that the making of wigs be deftly conjoined with instruction in the science of Dermatology, if we should not have been thereby liable to be suspected of interested and *personal* motives! We leave the adoption of these improvements, so obviously necessary, and so plainly consistent, to the unquestioned wisdom of the present Board of Regents.

Finally, and seriously, in taking leave of this whole subject, we have but one word more to add. In all that we have said upon this matter, we have endeavored to keep within the just bounds of decorous and courteous controversy, and if at any time we have transcended them, it has been through inadvertence, and we here and now disclaim any such intention.

Very respectfully,
F. M. OAKLEY.

Condensations from our Exchanges.

PRACTICE OF MEDICINE AND THERAPEUTICS.

Diseases of the Viscera as Related to Pain or Tenderness of Certain Portions of the Spinal Cord.—Leyden (*Journal of Nervous and Mental Diseases*, Jan., 1876) says that affections of the stomach most frequently have their dorsal point at the fourth dorsal vertebra, affections of the heart at the fourth and fifth dorsal vertebræ, while those most often tender in biliary colic are the eighth and ninth dorsal. These visceral affections are frequently combined with neuralgias; for example, many heart affections, particularly palpitatious, and angina pectoris, being accompanied by intercostal and brachial neuralgias. Traube has shown, in respect to gastric disease, that intercostal neuralgias are often a prominent symptom of ulcer of the stomach. An analogous significance has spinal pain. Sometimes it is extremely severe, and so far as my observation goes to show, it most frequently occurs in connection with those gastric affections which lead to the rapid development in and eructations of gas from the stomach. In an aged lady, who sometimes exhibited nervous symptoms, I saw, during an exacerbation of a chronic gastric catarrh, such severe pain and tenderness of the spinous processes of the fourth and fifth dorsal vertebra, that the patient bent backwards in distress at the slightest touch. With the improvement of the stomach disorder there was a corresponding diminution of the symptoms of spinal irritation. In another patient, a healthy looking girl, who sufferred with a periodically remitting and exacerbating gastralgia, with formation of gas in the stomach, the exacerbation was introduced each time by extreme sensibility of a space along the spine, extending from the fifth to the seventh dorsal vertebra, and with a feeling of fatigue in the back, and radiating pains in the neck and along the arms as far as the elbows.

TETANUS—ITS PATHOLOGY.—Dr. Bannister (*Journal of Nervous and Mental Diseases*, Jan., 1876), from an article embodying a carefully observed case and a review of our positive knowledge, sums up the course of most eases of tetanus as follows:

1. A peripheral wound, involving the sensitive nervous fibres, and causing an irritative local lesion—a neuritis.
2. Transmission of this irritation, either merely as such or as actual inflammation, through the nerve trunk and the gray matter of the cord to the medulla and pons, and possibly to the higher reflex centres in the optic thalamus and corpora quadrigemina, or perhaps even to the cortical motor centres of the brain.
3. Reflection of this irritation along motor nerves, at first only the trigeminus and accessory, then gradually involving other and spinal nerves, and producing tonic contraction of nearly all the muscles of the trunk. This is the condition till death in many cases of the disease, but in others convulsions appear in a late stage of the disease. Death may occur from exhaustion, asphyxia or paralysis of the heart. This is probably due to involvement of the cardiac innervation in the disease and to direct implication of the nucleus of the vagus nerve, although it may possibly be due to a cardiac tetanus.

INEBRIETY—ITS TREATMENT.—Dr. T. D. Crothers (*Medical and Surgical Reporter*, Sept., 25, 1875), in a paper on the treatment of inebriety at the Albany Penitentiary, makes the following summary:

1. Experience indicates that inebriates of all grades can be made producers, and to more than earn their cost of living.
2. Whether curable or not in the full meaning of the word, they can all be reformed, benefited and made industrious for a time—a positive gain to themselves and the world.
3. The diseased will and physical force of the inebriate must, for the best results, be guided and controlled by the normal reason of another.
4. As in other diseases, where perfect obedience to the dicta of the physician is absolutely essential, so in inebriety submission, restraint and faith must constitute the first elements of treatment.
5. The sharp discipline of prison life is particularly fitted to strengthen and develop the feeble impulses, and to control the diseased longings in which consists the beginning of true reform.
6. Labor of body and mind in a moderate degree is a powerful aid in

breaking up the old channel of thoughts, and giving the mind new responsibilities.

7. The experience and success of this institution among the worst and least hopeful of patients, founded on two principles, military discipline and occupation of body and mind, indicate the most hopeful promise of future results.

ELECTRICAL TREATMENT—FACTS SHOWING THAT ITS SEDATIVE AND TONIC EFFECTS ARE INDEPENDENT OF ANY MENTAL INFLUENCE.—Dr. G. M. Beard (*Archives Electrology and Neurology*, May, 1875) adduces the following facts as proof of the above statement:

1. Persons who have no faith in electricity, who, indeed, at first doubt its value, are yet benefited by it.
2. Persons of cool imaginative temperaments, who receive the treatment passively and indifferently, yet are improved thereby, though less rapidly than those who have opposite temperaments and strong faith in the remedy.
3. Young children, even infants, are very decidedly benefited by general and central electrization. The sedative and tonic effects of these methods of treatment are sometimes appreciated by nursing infants more rapidly than by adults.
4. Animals improve in nutrition under general electrical treatment—galvanic and faradic.

There is no doubt that he who uses the agent heartily and enthusiastically inspires hope and faith in his patient, and obtains the very important co-operation of mental therapeutics with electro-therapeutics, and thus often succeeds where the cold, calculating observer fails, though the latter may be as skillful in the use of the agent as the former.

EPILEPSY—ITS MECHANISM.—Vulpian (*Journal Nervous and Mental Diseases*, Jan., 1876) gives this about as follows:

1. Some irritative or exciting influence is conveyed to certain nervous centres.
2. A temporary paralysis or exhaustion of that part of the brain on which consciousness depends.
3. An excitation in a reflex way of the motor apparatus, which in turn leads to the convulsive movements. In other words, he believes that the vaso-motors play a subordinate part, if any, to say the most in the mechanism of epilepsy. The admitted changes in the calibre of the vessels and the convulsive action of the voluntary muscles are declared to be truly reflex in character.

OBSTETRICS.

THE TIME OF COMMENCEMENT OF LABOR.—Prof. L. Kleinwachter (*Zeit. fur Geburtsh*)—*Amer. Obstet. Jour.*, Feb., '76), examined the records of 3,408 cases of labor, to ascertain the time of day at which they began, and the immediate cause of labor. He concludes:

1. The majority of labors begin between 4 P. M. and 6 A. M. The pains begin most frequently between 10 and 12 P. M.; most rarely twelve hours sooner.
2. In primiparæ the influence of the time of day on the commencement of labor is about the same as in all women in labor.
3. In multiparæ the favorite time for the commencement of labor is between 4 and 12 P. M.; these are the only hours during which the number of commencing labors rises above the average.
4. Between the ages of twenty-one and twenty-five years, the acme of

female procreative life, the time of day exercises the most influence on the beginning of labor. From 7 A. M. to 3 P. M. begin the smallest number of labors. The most unusual time is from 10 A. M. to 12 M.; the most frequent twelve hours later.

5. If the woman is younger the influence of the time of day decreases, besides the time of the largest average advances by three hours.
6. With advancing years the same decrease is also noticeable, the more the older the woman is. The time of the smallest average also advances by three hours.
7. In male and female births the influence of the time of day seems to be nearly equal, if anything less marked in female labors.
8. In labors at term the influence of the time of day is about the same as in all women in labor.
9. In labors before term the influence of the time of day on the commencement of the labor is least marked.

RETAINED PLACENTA REMOVED BY INJECTING THE UMBILICAL VEIN.—Dr. Sneard (*Doctor*, Feb., 1876), again calls attention to the fact that a safe and efficacious procedure for arresting uterine hemorrhage and after-pains, as well as for detaching the placenta, when retained, is the injection of cold water through the umbilical veins. A clean section must first be made to bring the vessel clearly into view and shorten the cord, which ought not to be more than 20 or 30 centimetres long. The syringe, which requires to have a long canula, should contain at least 150 grammes of fluid. The colder the water injected the less is found to suffice.

POST PARTUM HEMORRHAGE—ITS TREATMENT.—Dr. Duchenne (*Gaz. des Hop. Clinic*, Feb. 26, 1876), from his own observations and reflections, gives the following rules respecting the introduction of the hand and removing the blood from the uterus after delivery:

1. In weak anæmic women we should abstain entirely from the introduction of the hand, and limit ourselves to the repeated administration of small doses of ergot, and friction of the uterus.
2. In strong, full blooded women, we may boldly introduce the hand for the purpose of emptying the organ, and if necessary may repeat it a second and a third time. In addition we should resort to cold water effusions, ergot, friction, etc.
3. Under ordinary circumstances we should limit ourselves to a single removal of the blood by the hand.

Having followed these rules for a series of years, the author says that he has had unusually good results.

PUERPERAL FEVER—IS IT EPIDEMIC.—Dr. J. Mathews Duncan (*Edinburgh Med. Jour.*, March, 1876) presents an enormous array of facts bearing on this question. These facts are drawn from the statistics of London, and admirably grouped in diagrams. They begin with 1848 and end with 1874. All statements of mortality are estimated from the population of London for 1874. The proportion of the lowest to the highest *yearly* mortality was: for cholera, 1 to 370; for small-pox, 1 to 146; for scarlatina, 1 to 11⅓; for rheumatism, 1 to 1⅔; erysipelas, 1 to 3; for puerperal fever, 1 to 3; for bronchitis, 1 to 2⅔. Thus there seems to be a normal average of yearly mortality, for the last four diseases, including puerperal fever.

The proportion of the lowest to the highest *weekly* mortality was for scarlatina, 1 to 81; for rheumatism, 0 to 27; for erysipelas, 0 to 26; for puerperal fever, 0 to 19.

The diagrams show that the small rise of weekly puerperal fever mortality is a purely accidental and irregular variation—no gradual rise to or beyond the range of the average number of the cyclical epidemic climax; no rapid fall; no period of continued non-prevalence, as in the epidemics of scarlatina, small-pox, and of cholera. We think that Dr. Duncan has here proved that erysipelas and puerperal fever do not occur as epidemics; that puerperal fever does not behave like any recognized epidemic disease, as scarlatina; in short, puerperal fever is not epidemic.

DYSMENORRHEA MEMBRANACEA—ITS PATHOLOGY.—Dr. Beigel (*Archiv. fur Gynecologie—Lond. Med. Record*, March, 15, 1876), from an exhaustive examination of this subject, concludes:

1. The so-called dysmenorrhea membranacea occurs in consequence of primary or secondary disease of the uterine mucous membrane—endometritis.
2. The characteristics of this disease consist in a pathological change of the mucous membrane, whereby, in consequence of well marked cell proliferations from beneath, the membrane is shed in large shreds, or as a continuous sac.
3. The expulsion of this as a rule occurs through contraction of the uterus after preceding hemorrhage, menstrual or otherwise, whereby closure of the os internum, by the membrane, leads to retention of blood and the production of intense pain.
4. As menstruation plays a secondary part in the development of this affection, and the formation of the membrane is in no way connected with conception or abortion, it seems better to give up the terms "dysmenorrhœa membranacea," or "menstrual decidua," and adopt the term "endometritis exfoliativa."
5. The microscopic examination of the membrane does not give uniform results. In one class of cases we find the normal elements of the mucous membrane merely pathologically increased; in another series the individual elements of this, as the glands or epithelium, are lost or in a state of degeneration. In a third class embryonal cellular tissue is formed; and in a fourth epithelium plates or cells, which are very similar to these alone or in conjunction with the embryonal tissue of the skin elements of the membrane.
6. In all cases it forms a marked cellular production, constituted of free cells which form the definite occasion of the loosening of the mucous membrane from its attachment.
7. The pathological changes of the uterine mucous membrane in endometritis exfoliativa appear to be such that the development of an impregnated ovum in the uterine cavity cannot take place, therefore the patients, as long as they are under the influence of the disease, are sterile.

PHYSIOLOGY.

HOW DO NERVES TRANSMIT IMPULSES?—Dr. R. McDonnell (*Medical Times*, Jan. 8, 1876) answers this question as follows: "I conceive that the various peripheral expansions of sensitive nerves take up undulations or vibrations and convert them into waves capable of being propagated along nervous tissue. Thus the same nerve tubule may be able to transmit along it vibrations differing in character, and hence giving rise to different sensations; and consequently the same nerve tubule may in its normal condition transmit the wave which produces the idea of simple contact or that which produces the idea of heat, or again the same nerve tubules in the optic nerve which propagate the undulations of red may also propagate in normal vision those which excite the idea of yellow or blue, and so for the other senses."

RAPIDITY OF THE SENSORY NERVE CURRENT IN MAN.—M. Bloch (*London Lancet*, Jan., 1876), from a new series of researches, finds that in the spinal cord sensory impulses move at the rate of one hundred and ninety-four metres per second, and in the nerves at the rate of one hundred and thirty-two metres per second. He ascertained that the persistence of a tactile sensation augments as the acuteness of sensibility diminishes.

THE SPINAL CORD—ITS SENSORY ROUTES.—Woroschiloff (*Ludwig Arbeiten—Journal of Nervous and Mental Diseases*) gives a series of very careful experiments upon the above subject. By a peculiar apparatus he was able to make any desired section of the cord. The result of these studies shows that the lateral columns contain both motor and sensory fibres; that the action of these latter is crossed for the anterior part of the body, but not equally so in all parts of the lateral column, being most pronounced in the fibres of its middle third. Motor fibres are also present in these columns for the same parts of the body.

Irritation of sensitive surfaces situated in front of the lesion of the cord only produced reflex actions in the limbs on the side of which at least a part of the lateral column was intact; if it was entirely destroyed, it was impossible to cause reflex movements in the hinder limbs, no matter how strongly the forefoot or ear of the corresponding side of the animal was irritated. But not every unwounded section of the lateral columns sufficed to permit reflex movements, the anterior half was required to be intact.

Co-ordinated movements, such as those of sitting or springing, required the integrity of the middle third of the lateral columns. Electrical irritation of the cervical cord below the calamus scriptorius caused repeated alternating flexion or extension, or tetanic contraction of the limbs. For the first the integrity of the middle third of the lateral columns was required; the second occurred even when the whole of the corresponding lateral column was destroyed. The tetanizing fibres for both limbs are therefore contained in each lateral column, but if one of these is totally severed with the anterior two-thirds of the other one, the tetanus is confined to the side on which a portion yet remains. Thus the lateral columns contain both sensory and motor fibres intermixed.

SPINAL CORD AS THE ORGAN OF THE MIND.—Dr. W. A. Hammond (*Jour. Nerv. and Ment. Diseases*, Jan., 1876), from a discussion of this subject, concludes:

1. The mental faculties, perception and volition, are seated in the spinal cord as well as in the cerebral ganglia.
2. The cord is not probably capable of originating mental influence independently of sensorial impressions—a condition of the brain also till it has accumulated facts through the operation of the senses.
3. As memory is not an attribute of the mental influence evolved by the spinal cord, it requires, unlike the brain, a new impression in order that mental force may be produced.

VASO-MOTOR NERVES OF SPINAL CORD.—M. Vulpian (*Jour. Nerv. and Ment. Diseases*, Jan., 1876) gives the following results of certain experiments on the vaso-motor nerves of spinal cord: Excitation, by means of the induced current of a communicating branch passing between a ganglion of the sympathetic and the root of a spinal nerve, led to the constriction of the vessels that are visible on the surface of the cord, in that part of its course which corresponded to the irritated nerve fibres. If the excitation ceased the vessels recovered their normal size, and if it was resumed they became again constricted. The same results followed excitation by means of the induced current of an intercostal nerve between the point at which it receives a communicating branch from the sympathetic and that of its implantation in the spinal cord.

BLOOD-VESSELS—THEIR INNERVATION.—Huizinga (*Pfluger's Archiv.—Lond. Med. Record,* Dec. 15, 1875) confirms the results of Goltz, Tarchanoff, Putzey's, etc., observations. The doctrine of the innervation of the blood-vessels has undergone great changes in a short time. At first it was a tolerably simple affair so long as it was imagined that the vaso-motor centre for the entire body lay in the medulla oblongata, and that the vaso-motor fibres were distributed in all directions through the sympathetic. Later discoveries have necessitated changes in this relatively simple theory. First there were the vaso-dilator nerves; then the vascular reflex action upon sensory stimulation; then facts that seemed to show that the vaso-motor centres are distributed throughout the whole spinal cord, and lastly the view that the size of the vessel does not depend upon spinal nerve cells alone, but is also controlled by peripherally situated nerve cells.

SYMPATHETIC NERVE—EFFECT OF ITS DIVISION IN YOUNG ANIMALS.—Dr. Wm. Stirling (*Brit. Med. Jour.*, August 28, 1875) reports the following interesting observations: In operating upon young animals, the rabbit or dog, he first noticed the ordinary symptoms of the operation. But as the animal grew, it was found that the ear of the side in which the nerve was divided grew more than that on the other side. The hair of the ear upon this side became stronger than on the opposite side, and lastly the temperature of the affected part continued higher than that of the other side for several months together.

RELATIONS OF SPINAL CORD TO THE ABSENCE OF CERTAIN DEFINITE PARTS OF THE BODY.—From *Journal of Nervous and Mental Diseases,* January, 1876, we take a notice of two cases of monstrosity. One was observed by Mayer, of Bonn, in which, with the absence of the genital apparatus, there was also absence of that portion of the spinal cord which has been fixed upon as containing the genito-spinal centres; and another by Serres, in which, with absence of the superior extremities, there was absence of the corresponding parts of the cervical portion of the cord.

CIRCULATIONS OF THE LIVER—IN ITS RELATIONS TO THE CENTRAL NERVOUS SYSTEM.—Dr. Jewell (*Jour. Nerv. and Ment. Diseases,* January, 1876) says that lesions of other parts of the nervous system than the floor of the fourth ventricle may modify the circulation and functions of the liver—as the medulla itself (Bernard), the vermiform process of the cerebellum (Eckhard), or of the optic thalmi, pons varolii or middle peduncles of the cerebellum, or anterior columns of the spinal cord in their whole length (Schiff). Still the effects of injury of floor of fourth ventricle are most marked upon circulation of the liver.

GLOSSO-PHARYNGEAL NERVE—ITS VASO-DILATOR ACTION ON THE VESSELS OF THE MUCOUS MEMBRANE AT BASE OF TONGUE.—A. Vulpian (*Compt. Rendus—London Medical Record,* Nov., 1875) shows that the glosso-pharyngeal is the vaso-dilator nerve for the posterior parts of the lingual mucous membrane just as the chorda tympani is for the anterior part of the tongue. Electrical stimulation of the glosso-pharyngeal produces intense redness of the part of the tongue supplied by that nerve. Further, the author has convinced himself that, after destruction of all anastomoses, this action of the glosso-pharyngeal nerve remains the same.

SURGERY.

Cysticercus of the Vitreous Successfully Removed.—Wecker (*Med. Surg. Reporter, Feb.* 26, 1876) successfully removed a cysticercus from the vitreous humor. He first tried to puncture the vesicle and so destroy the animal. Failing in this, he made an incision into the sclerotic nearest to the animal, and inserting an iris forceps, he seized and drew it out. It was found attached to the retina. In a month the patient was discharged, being able to count fingers at a fee.

Detachment of the Retina—Its Curability.—M. Galezowski, (Recucit. d'Oph.—*Lond. Med. Record*, March 15, 1876) giving the results of an extended observation, concludes:

1. Detachment of the retina admits of cure.
2. In recent cases, and especially in young subjects, antiphlogistic treatment, combined with absolute rest, will sometimes bring about a complete recovery.
3. In detachments of long standing an iridectomy is capable of arresting any further progress, but it will not prevent the occurrence of cataract.
4. In cases brought about by syphilis, mercurial treatment' by inunction will effect a cure.
5. In an eye in which a detachment has receded, one generally finds a white striated appearance where the retina has been disturbed, with more or less evidence of atrophy of the subjacent choroid.

Extraction of Foreign Bodies from the Ear.—Dr. W. Rivington (*Brit. Med. Jour.*, March 18, 1876) takes the following steps in the procedure of removing foreign bodies from the ear:

1. Examine the ear carefully by direct light and with the speculum and mirror, to determine the presence, position, size, nature and peculiarities of the substance.
2. If the patient be a child, and refractory or timid, place him on a couch, give ether or chloroform, and use the syringe, turning the affected ear downward. This maneuvre may be aided by drawing the auricle upwards and backwards and applying the nozzle of the syringe to the upper wall of the passage.
3. If the foreign substance do not fall out, as it usually does after a little patience, but stops near the orifice of the meatus, a fine pair of forceps may be used to draw it out.
4. A needle or pin, or other elongated body which does not fill the passage, may be readily taken out with forceps through the speculum or by the aid of direct light.

Deep-Seated Ophthalmia Treated by Section of the Cornea.—Dr. J. V. Solomon (*Brit. Med. Jour.*, March 18, 1876) strongly recommends *the application of free section of the cornea to cases of deep-seated ophthalmia threatening destruction of the eye.* He gives in detail two cases—one of ophthalmitis and one of sympathetic irido-choroiditis—that were speedily relieved by this treatment after all usual measures had failed.

Hip Disease—Its Pathology and Operative Treatment.—Dr. Thos. Annandale, (*Edinburgh Med. Jour.*, Feb., 1876) from an extensive experience and careful study, concludes:

1. Although hip disease may commence in the synovial membrane or pelvic bone, it orginates most frequently in head of the femur.
2. The early, sure, and safe detection of the exact condition of a diseased hip or other joint when symptoms of suppuration are present

or are doubtful by means of an antiseptic exploratory incision is a valuable improvement and aid in the treatment of joint affections.

3. The early excision of the head of the femur, when diseased, is the treatment most likely to check the progress of hip disease and to cause the patient's recovery with a movable and useful limb.
4. Therefore when signs of suppuration exist in connection with hip disease, an exploratory incision should be made and the condition of the joint determined.
5. If the articular surfaces are found to unaffected, means should be used to favor the free escape of pus or other fluid from the joint and care taken to keep the articulation perfectly at rest.
6. If the articular cartilage of the head of the femur is found to be destroyed, and the disease is limited to this portion of bone, excisions should be at once performed by sawing through its neck.
7. If the disease affects more than the head of the femur, this portion of bone, together with the neck and great trochanter, should be excised and any diseased portion of the acetabulum also taken away.
8. In all operations on the hip or other joints antiseptic precautions should be carefully employed during the operation and until the wound is healed, as this treatment is the most certain known means of lessening the mortality.

NÆVUS—ITS NATURAL HISTORY.—Dr. Jno. Duncan (*Edinburgh Med. Jour.*, Feb., 1876) says that nævus is of uncertain habit, and it is impossible to say of any one example that it will progress, remain stationary or wither away. Certain probabilities are worthy of remark. The disease may or may not be congenital. Sometimes at birth there is an indication of its presence—as often there is not. Within a few weeks after birth, however, the character and extent of the deformity have usually fully declared themselves. Then there is a pause. The period of the first dentition is the important epoch in the history of nævus. A large number then retrograde—about one-third; some entirely disappear; some shrivel and diminish; some abandon the subcutaneous tissue, but leave a stain upon the skin; some degenerate in a fibrous or calcareous manner, or undergo a cystic transformation. Of the remaining two thirds, fewer and fewer continue to increase as time goes on—now and again one dwindles away. At the second period of dentition and again about puberty a further marked diminution takes place, and at length in adult life it is rare to find any other form of nævus than the port wine staining of the skin.

GLAUCOMA—TREATED BY TREPHINING THE SCLEROTIC.—Dr. A. Robbertson (*Edinburgh Med. Jour.*, Feb., 1876) has devised an operation suited to those cases in which an iridectomy could not be satisfactorily effected, or others in which it had failed to afford relief. The operation consists in trephining the sclerotic, thus making a circular aperture into the chamber of the vitreous humour about one-twelfth of an inch in diameter. The escape of some of the contents of the eye at once served to reduce the tension, while the author believed that this effect was probably permanent, as the circular opening in the sclerotic must be filled up by new tissue having less resisting power than the original membrane, and would thus readily yield to pressure from within, acting the part of a safety valve, should at any future time the contents of the vitreous chamber be increased in amount.

In four cases, Bowman's cornea trephine had been used. The objections to this instrument were the difficulty with which it penetrated the tough sclerotic and with which it was held while making the necessary rotatory movements. In all cases the aperture was made through the upper part of the sclerotic, at a point about two lines from the margin of the cornea.

Phlyctenular Keratitis—Treated by a Strong Ointment of Yellow Oxide of Mercury.—Dr. P. A. Callan (*Medical Record*, March 4, 1876) strongly recommends the use of the yellow oxide of mercury in phlyctenular keratitis. He mixes it with the glycerate of starch in the proportion of one part to four or six. He claims for this strong ointment certain advantages over the ordinary methods of treatments, viz., certainty of cure, great reduction of the per centages of relapsing cases, alleviation and disappearance of the intolerance of light. In using the ointment, a quantity not larger than half a pea should be put in at one time. The lids should be closed and the eye-ball gently rubbed, so as to make the salve be distributed equally over the surfaces of the cornea and conjunctiva. The application should be made daily. Treatment is continued for two or three weeks after an apparent cure of the disease.

Editorial.

Original Articles, Reports of Medical Societies, Observations, Correspondence, News, etc., of general interest, are respectfully solicited from every source. Articles should be practical and carefully prepared.

The Editors will not be responsible for statements made over the names of contributors.

SHALL WE HAVE AN INTERNATIONAL MEANS FOR COMMUNICATING THE RESULTS OF MEDICAL OBSERVATIONS?

From a circular issued by Dr. E. Seguin, of New York, we glean the following facts. When the use of Latin as a means of recording all scientific thought was discarded it became more and more difficult for scientific observers to communicate with one another and so mutually to obtain the benefits of their individual labors.

Not only was it required of each to learn the language of all the others, but also their standards of measures, instruments and methods of observation.

The time and labor thus employed were necessarily taken from real scientific work. Further, the liability to errors was infinitely multiplied.

In the present plan it is proposed to reconstruct a unity of understanding among physicians, upon a basis more universal and scientific than language; namely, on mathematics, as applied to uniform weights, measures and methods of observing and recording observations.

The plan has during the past three years been submitted to various prominent medical societies in America and Europe, and has been received with increasing evidences of approval. Many eminent physicians and scientific men are earnestly endeavoring to bring it into practical operation.

It is now proposed to submit the same question to the next International Medical Congress, to ask the congress to constitute national commissioners, similar to the French one, which has volunteered its services in Paris—to appoint the next meeting of the International Medical Association as the place where these commissioners will present a joint report on the most practical means of *uniformizing* the methods, instruments and records of observation, and to consider the feasibility of this plan in connection with the adoption of the French metric system. All the executive measures demanded for the realization of this plan are entrusted to Dr. Wm. B. Atkinson, the general secretary of both the American and International associations.

Physicians desiring to co-operate in this matter should communicate with either Dr. Atkinson or Dr. E. Seguin.

Let no one wait for others, either great or small. All have a common interest in the matter, and each should contribute his mite toward its feasible accomplishment. That day will mark an epoch in the progress of medicine, when English and Italian, French and Russian, Spaniard and Swede, American and Dane, shall have one universal means of comparing their individual labors and inventions.

CHANGE OF PUBLISHERS.

By announcement elsewhere it will be seen that after this date the business of the Review will be in the hands of the widely-known publishing house of E. B. Smith & Co. We bespeak for them, from both advertisers and subscribers, the same courtesies and fair dealing that we have ever received. For nearly eleven years, both the editorial and business relations of the Review have been exclusively in the hands of medical men; meantime the field of medical journalism has marvelously changed. Of these changes we cannot now speak, except to say that the time has arrived when the interests of the Review could be best advanced by committing its business to business men. The editorial management will remain the same as hitherto. Independent, in the only sense in which independence is possible, the Review opens its columns to all on precisely the same terms.

The tenth annual meeting of the Michigan State Medical Society will be held at Ann Arbor, commencing at 10 A. M., May 10th. Important matters will come up for consideration. It is our hope that all who attend may desire above all things so to act that "the good name and welfare of medicine shall rise above all other interests." The action of the society at this meeting will greatly influence its position among sister societies and the great brotherhood of regular physicians. The eyes of the world are upon us. Having all the facts carefully in mind, let us counsel deliberately and honestly, deciding firmly and unflinchingly for the right. May it never be said, after our meeting, that the Michigan State Medical Society countenances "the *association* of *regular* physicians with *charlatans without rebuke*."*

READERS will observe that sixteen extra pages are added to this number of the REVIEW. Thus we are enabled to print in full the official report of the alumni association of the medical department Michigan University, and the letters commenting on it, without curtailing other departments.

MEMORANDA.

Physicians visiting the centennial exhibition will find the REVIEW regularly on file at Rowell's newspaper building.

Prof. Jno. Morgan, F. R. C. S., Professor of Anatomy in Royal College of Surgeons, Ireland, died of enteric fever, March 4, aged 47 years.

Andrel died February 18, at the age of 79. Thus the great triumvirate of the Paris medical school of forty years since, namely, Andrel, Chomel, and Louis, has at last wholly passed away.

The deaths at Lansing, Mich., for March last, were eleven—or at the annual rate of 15.22 in 1,000. For February, at annual rate of 11.89 in 1,000. For January, at annual rate of 11.20 in 1,000.

The Wisconsin legislature has decided that it is not advisable to establish a medical college in that State; hence they have sold the buildings appropriated by a former legislature for that purpose.

Dr. Warburton Begbie, of Edinburgh, Scotland, died February 25, aged 50 years. Deservedly popular, he had an enormous consulting practice. He was well known to the profession by his able contributions to medical journals.

Dr. Jno. S. Parry died at Jacksonville, Florida, March 11, 1876, aged 34. His last works were the editing of the last American edition of Leishman's "Midwifery," and the preparation of his work on Extra-Uterine Pregnancy.

Dr. Parkes died in March last. He was widely known and honored for his great work on hygiene; his valuable annual reports; his contributions to the study of cholera, the chemistry of waste and nutrition in the body, and the physiological action of alcohol.

Dr. Duncan Gibb died of phthisis, May 15, aged 55. He was best known in this country by his works on diseases of the throat, but in Great Britain he was equally well known by his excellent contributions to the sciences, especially geology and anthropology.

Wisconsin has just passed, by her legislature, a law creating a State board of health. Appropriation $3,000. This is the eleventh State which has taken such action. Board not yet organized, and will not be until after the meeting of the State medical society, June 6th.

The Iowa State Medical Society has protested against the endowment of a medical department of their State University. The basis of the protest was the lack of clinical advantages afforded by a small town. Perhaps they had heard concerning the practical workings of the medical department of Michigan University.

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* Boston Med. & Surg. Jour.

A new medical college was organized at Ft. Wayne, Indiana, May 14. Seven professors were announced and a demonstrator of anatomy. The Allen County Medical Society concludes a series of resolutions emphatically denouncing the plan, saying that they regard the establishment of the above school simply as a means of dishonorable advertising.

Graduates of American medical colleges, continued from page 316:

Missouri Medical College	67
St. Louis Medical College	46
Woman's Medical College, Philadelphia	12
Miami Medical College	50

In April the publication of a series of micro-photographs in histology—normal and pathological, will be commenced by J. H. Coates & Co., 822 Chestnut street, Philadelphia, Pa. They will be prepared by Drs. Carl, Seiler, J. Gibbons Hunt, and Jos. C. Richardson, and be issued in monthly parts, each containing at least four plates, with descriptive letter press. In each issue, one pathological picture will accompany three normal specimens. The price of each monthly part is 60 cents, or $6.00 for twelve parts. It would seem to us that this publication might be one of great value to the profession, and especially to medical students.

The annual Commencement of the Medical Department of the University of Michigan was held March 29th. The number of graduates was seventy-seven. The very able address to the graduates was delivered by Dr. J. H. Beech, of Coldwater. The salary of Dr. W. J. Herdman, demonstrator of anatomy, was raised to $1,000 a year. Dr. Geo. E. Frothingham was appointed professor of ophthalmology and materia medica. Dr. Rose was restored to his former position of assistant professor of chemistry, with his former salary, from January 1. The laboratory is indebted to the University for $6,984.00. Both a majority and minority report agree upon the above sum as the smallest shown by the books. Not having sufficient evidence to determine to whom this deficit is chargeable, the two reports were referred to Regents Grant, McGowan, and Estabrook, with instructions to employ an accountant, to take testimony, and to determine who is responsible for the deficiency, and then call a meeting of the Board.

The Meigs County Medical Society, Ohio (*Richmond, Louisville, Med. Jour.*, March, 1876), after a preamble setting forth the facts, unanimously passed a series of resolutions from which we extract the following: "That the Medical Faculty of the University of Michigan is not deserving of respect on the part of the regular profession, and has through its board of regents cast opprobrium upon her alumni within the borders of her own State, and should not be sustained by the regular profession in any portion of the country. That the old faculty which continues to sustain such a dishonorable relation to quackery is deserving of censure from all well organized societies of the regular profession, and that the American Medical Association should be petitioned not to recognize any member of that faculty as a member of the Association." The final resolution states that these are intended as an "earnest protest against any compromise with charlatanism, whether legalized by legislative enactment or prompted by any desire for popularity by those who for that cause would prostitute a noble and respectable profession."

The twenty-seventh annual session of the American Medical Association will be held in the city of Philadelphia, Pa., on Tuesday, June 6, at 11 A. M. Delegates receive their appointment from permanently organized State medical societies and local societies as are recognized by *representation in their respective State societies* and from the medical departments of the army and navy of the United States; and each local society can send one delegate for every ten of its resident members, and one for every additional fraction of more than half that number. Secretaries should forward their lists at once to Dr. Atkinson. Papers must be sent to the secretaries of the appropriate sections at least one month before the meeting of the various sections. The following are the secretaries: of Practice of Medicine, Materia Medica and Physiology, Dr. B. A. Vaughan, Columbus, Miss.; of Obstetrics and Diseases of Women and Children, Dr. Robert Battey, Atlanta, Ga.; of Surgery and Anatomy, Dr. E. T. Easley, Dallas, Texas; of Medical Jurisprudence, Chemistry and Psychology, Dr. V. L. Hurlbut, Chicago, Ill.; of State Medicine and Public Hygiene, Dr. Ezra M. Hunt, Metuchen, N. J. The foregoing facts of general interest are taken from the annual circular issued by the Permanent Secretary, Dr. W. B. Atkinson.

The committee of arrangements for the Centennial Medical Commission have sent us a circular, from which we condense the following facts of universal interest:

The International Medical Congress will be formally opened at noon, the 4th of September, 1876, in the University of Pennsylvania. Ten addresses will be delivered before the Congress in general meeting. The addresses will be upon various subjects pertaining to surgery, medicine, etc. We notice only one foreigner in the list, viz: Dr. Herman Lebert.

For discussion of various subjects, the Congress will be divided into nine sections. Questions are given for discussion, and the names of the gentlemen who will open it. To facilitate debate, on the first of June the outlines of the remarks by the several reporters will be published. Copies of these can be obtained from the corresponding secretaries. A public dinner will be given Setember 7th, at 6:30 P. M. Registration books will be opened August 31, from 12 to 3 P. M., in the hall of the College of Physicians, N. E. corner of 13th and Locust streets. Credentials must be presented in every case. The registration fee for American members is $10, and will entitle each member to a copy of the transactions. S. D. Gross, M. D., President; William B. Atkinson, M. D., 1400 Pine street, Recording Secretary; William Goodell, M. D., 20th and Hamilton streets, and D. G. Brinton, M. D., 115 South 7th street, American Corresponding Secretaries; Richard J. Dunglison, M. D., 814 N. 16th street, and R. M. Bertolet, M. D., 113 S. Broad street, Foreign Corresponding Secretaries. Any further information desired can be obtained from the secretaries.

Book Notices.

GENERAL PATHOLOGY—A MANUAL FOR THE USE OF STUDENTS AND PRACTITIONERS OF MEDICINE. By Ernst Wagner, M. D., Prof. General Pathology and Pathological Anatomy in the University of Leipzig. Translated from the Sixth German Edition by Drs. Jno. Van Duyn and E. C. Seguin. Cloth. Pp. 728. 1876. New York: Wm. Wood & Co.

A careful examination of this book has convinced us that it gives the most thorough resumé of the elements of medicine of any book printed in the English language. The arrangement of the matter renders it available to both students and practitioners.

The book is divided into four parts—General Nosology, General Ætiology, General Pathological Anatomy and Physiology, and the Pathology of the Blood. The general principles and most important evidence supporting them are given in large type—less important documentary evidence, etc., is given in smaller. Lack of space forbids any full analysis of this library of medical knowledge. Speaking of general nosology, he says that "at the present time no method of study has penetrated so far towards the seat and causes of disease as pathological anatomy." "Yet pathological anatomy cannot by itself explain the relations of phenomena in the sick—this is best done by a knowledge of similar processes in the healthy body and the study of morbid processes by all the methods which are used in physiology for the investigation of the functions of the normal body. This is physiological medicine. * * There are no forces and substances by means of which normal and morbid life is kept up; no important difference between physiological and pathological laws. The difference lies in the conditions under which the forces and substances of the body operate." "The sources of general pathology, as well as those of practical medicine, are physics, chemistry, anatomy and physiology."

The methods of reaching a diagnosis are three: (1) From the recognition of the disease at first glance. (2) From the story which the patient tells of his illness. (3) From objective investigation. To proceed safely the first and second methods must not be followed exclusively. By our senses we should observe the anomalies presented by the diseased organism. Further, it is not sufficient to investigate that part of which the patient complains—we must inquire into the state of every part of the body and the condition of every function. To do this is essential to one who desires to proceed in a well grounded and certain manner. The physician's art consists mainly in the thoroughness of his examination.

Concerning inheritance as a cause of disease, he says: (1) "The condition of the parents before generation is of great importance for the offspring. * * It not seldom happens that at the time of procreation both parents appear healthy, though one of them bears the germ of tuberculosis—the children of such may become tuberculous. Further, the inheritance is not always of the very same lesions. If the parents have become the subjects of secondary syphilis their children often die in the womb and the foetus is ejected before the end of pregnancy as a putrefying body; or the children die in the first few weeks of life of simple wasting, or they live and later become scrofulous, or lastly they in turn become syphilitic. Drunkenness in the father not rarely causes mental disease in his descendants. It is a matter of common experience that in families in which insanity is hereditary we meet with examples of the greatest intelligence and with epileptics and imbeciles. It is still more remarkable how often two perfectly healthy parents will have healthy children with malformations and defects."

The inter-marriage of relatives is followed by sterility and abortion on the one hand and weakness and malformations of all kinds on the other. Wagner thinks that too great stress is attached to the condition of the parents during procreation. Such condition can only act by helping or preventing the contact of semen and ovum. During intra-uterine life, a large number of imperfections and diseases may arise, from independent diseases and from infection from the mother. He regards it as doubtful if mental states of the mother can affect the already formed embryo through the blood.

The influence of age in the ætiology of disease he considered under three heads: (1) The probability of becoming sick. (2) The mortality at different ages. (3) The predisposition to certain special morbid states. The *probability* of becoming sick is very great in the first week of life—it diminishes after the sixth week, though remaining great until the end of the first year. Then it progressively diminishes until the seventh or eighth year. From the eighth to the eighteenth it is again more frequent. With the complete development of the individual it gets rarer, reaching a second minimum between the twenty-fourth and thirtieth years. From that age to the end of life the liability to disease goes on increasing.

The influence of sex in the ætiology of disease arises from the anatomical and physiological differences between man and woman. "In woman there is less toughness and density of all the tissues—less development of the bones, of the striated and smooth muscles, of the external skin, and perhaps of mucus membranes—lesser size of the digestive apparatus and great glands, as well as of the kidneys—positively as well as relatively less tissue metamorphosis—smaller need of food—less development of the respiratory apparatus—smaller vital capacity of the lungs—smaller formation of carbonic acid—less perspiration—smaller amount of blood—smaller proportion of blood corpuscles and fibrin—a greater proportion of water, salts and albumen—smaller volume and weight of the brain—greater fatty deposit, etc." Men are especially subject to all diseases which are especially or solely caused by unfavorable hygienic conditions—or which are of meteorological origin—to such affections as are caused by occupations and professions, or by the abuse of alchohol or tobacco. Women are especially subject to diseases caused by education and customs. Thus nervous irritability, hysteria and spinal irritation have their origin in the absence of practical activity followed by healthy fatigue, in actual immersion in the contemplation of one's body, in excitation of the sexual appetite without opportunity for its gratification. * In all diseases, women endure better than men. Severe pain, great loss of blood, continued ill health, exhaust men quicker than women. In their relations with physicians they are more patient, tractable and thankful than men. Soil, as modifying the air and food, in both quantity and quality, exerts powerful influence in the ætiology of disease. The healthiest residence is upon the banks of a rapidly flowing stream. The most dangerous parts are low lands and marshy regions, and this in proportion to heat. There is special danger in uncultivated regions or where a previously fertile, peopled and healthy section is desolated.

More than sixty pages are devoted to a discussion of parasites, in their relations to the ætiology of diseases. These pages will be of particular interest just now, on account of the prominence given to this cause of disease. We know of no single book that contains in equal space as many facts bearing on this question.

The ever-recurring problem of inflammation is admirably stated. The American reader will be gratified to find such a full resumé of results reached by different workers. The subject of fever receives the consideration its importance demands.

This is one of the books recently published that every physician should place in his library, and one that every medical student should master ere applying for the degree of Doctor of Medicine.

For sale by E. B. Smith & Co., Detroit.

THE STUDENT'S GUIDE TO THE PRACTICE OF MIDWIFERY. By D. Lloyd Roberts, M. D., London. Cloth; pp. 315. Philadelphia: Lindsay & Blakiston.

This little book is written in a clear, concise style, and is correct as far as it goes. But we see no use for it except to advertise its author and humbug students. In our judgment, Leishman's work is the smallest that a student should be required to master ere practicing the art of obstetrics. The extent of the subject of obstetrics is such that it is impossible to truly and fairly discuss it within the limits of the volume before us. The profession and medical students would gain immeasurable were this book and all the class of so called compends, etc., burned, and none hereafter written.

For sale by J. M. Arnold & Co., Detroit. Price $2.25.

A SYSTEM OF MIDWIFERY—Including diseases of pregnancy and the puerperal state. By Wm. Leishman, M. D. Second American from second English edition; with additions by the late Jno. S. Parry, M. D. 1875. Philadelphia: Henry C. Lea.

It is scarcely worth while to give an extended notice of a book which has met such general approval as that a second edition was called for both in England and America in less than two years. Then as now it was the only complete work on obstetrics of modern compilation. In this edition the physiological sections, and that on puerperal fever, are so recast as to give a truer representation of the present state of our knowledge. Dr.

Parry has increased the value of the American edition by additions on various subjects, but mainly in the chapters on the use of the forceps, lactation and puerperal diseases. A chapter on puerperal wounds he has added; also, some illustrations representing the principal modifications of obstetrical instruments generally employed in this country.

Respecting the menstrual flow he adopts the views of Kundrat, based upon microscopic researches in the case of women who were either menstruating or pregnant at the time of their death. "He concludes that a few days before the menstrual flow is established a proliferation of the cells of the interglandular tissue takes place, by which that portion of the mucous membrane which lies nearest the cavity becomes infiltrated with newly formed round cells. When the capillary vessels rupture, these cells have already passed through a stage of cloudy swelling and fatty degeneration, and it is this *superficial* portion of the mucous membrane which is thrown off during the continuance of the discharge, and for some days after its cessation."

Dr. Parry gives his rule of guidance in applying the forceps as follows: "Never to wait more than two hours after the progress of the labor has been arrested, no matter whether the delay was due to inefficiency of the pains or disproportion between the size of the head and the pelvis, and no matter in what part of the parturient passages the head is arrested, whether it is at the superior strait, in the cavity, or at the outlet of the pelvis." This rule diminishes the dangers of both mother and child.

Dr. Wm. Goodell's method of treating the cord is quoted by Parry in approval: "When the child is ready for removal, Dr. G. cuts the cord at the usual place and then seizes it between the thumb and forefinger of the left hand close to the umbilicus. Holding it firmly in this position he then proceeds to 'strip' it with the thumb and index finger of the right hand. By this means all of the blood and much of the gelatine of Wharton removed. If there are accumulations of the latter in projections of the funis, these lobules are to be nicked with the scissors and their contents squeezed out. The pressure near the umbilicus should now be temporarily suspended when the internal portions of the vessels collapse. The part is now subjected to a second stripping, after which, hemorrhage having ceased, it is tied in the usual manner. It is now left entirely free, without any dressing whatever. The result is that it separates without any bad smell whatever, falling off 'like a ripe fruit,' without leaving a raw stump."

The question of anæsthetics is summed up by Leishman as follows: "In eclampsia, in some cases of mania, and in all cases of operative midwifery, it is invaluable. In ordinary cases it is always to be used with caution, but if employed in small quantities on the approach of each pain towards the termination of the second stage, it can do no harm. It thus allays pain and assuages nervous irritatability, and in the hands of the skillful practitioner it is a power for good and never for evil."

A word about works on obstetrics in general. It seems to us that it would be better were the physiological chapters and those on puerperal diseases omitted, the former could better be studied with general physiology, and the latter as a separate treatise. As now arranged, three volumes are bound in one and called obstetrics. Almost necessarily the physiology is imperfect and misleading, as is also the treatise on puerperal diseases and the care of infants.

The volume before us, far better than any other at the present day, meets the requirements of medical students and general practitioner.

THIRD ANNUAL REPORT OF THE SECRETARY OF STATE BOARD OF HEALTH, of the State of Michigan, for the year ending September 30, 1875. Cloth. Pp. 210.

During the year we have regularly published an account of the quarterly meetings of the board. From these accounts our readers will have learned that the board is actively at work, and is constantly extending the powers of preventive medicine. The first forty-eight pages of the volume before us details various facts respecting the real work of the board, its expenditures, members, standing committees, report on property of board, distribution of documents relating to poisonous papers, correspondents of board, various circulars, rules and regulations for local boards, meteorological observations and register, etc. This part of the report is prepared with great care, and is worthy of careful study.

Further, the report contains ten papers; two by Dr. H. O. Hitchcock, on "Local boards of health," and "Disposal of human excreta;" two by Prof. R. C. Kedzie, on "Use of poisons in agriculture," and "Ozone;" two by Dr. A. Hazlewood, on "Trichinæ," and "Water supply in its relations to health and disease;" one by Rev. Chas. H. Brigham, on "Influence of occupations upon health;" one by Dr. H. B. Baker, on "Failure to prevent deaths believed to have been preventable," and the "Reproduction of disease germs;" one on "Illuminating oils in Michigan," by A. A. Day; and one on "Drainage, in removing certain diseases and in promoting the health of Detroit," by Dr. H. F. Lyster.

The whole is most carefully edited by the able secretary, Dr. H. B. Baker. All interested in the material prosperity of Michigan, or in the advancement of preventive medicine, will find it both pleasant and profitable reading.

TRANSACTIONS OF THE THIRTIETH ANNUAL MEETING OF THE OHIO STATE MEDICAL SOCIETY. 1875. Cloth; pp. 200.

On opening this book, the first thing noticed was two pages of errata. The meeting was held at Put-in-Bay, entirely apart from the place of business of all the members. The able address of the president, Dr.

W. W. Jones, we have already noticed in a previous issue. Twelve papers were read, the discussions on several being quite fully reported. In order the papers were as follows: "The Relation of Regular Medicine to the 'Pathies' of the Day," by W. T. Ridenour, M. D.; "Practical Points in Eye Department," by W. W. Seely, M. D.; "Use of the Aspirator in Cases of Retention of Urine," by P. S. Conner, M. D.; "An Inquiry into the Mortality from Consumption in Life Insurance," by W. B. Davis, M. D.; "Puerperal Blindness" and "Railroad Locomotor Ataxis," by W. J. Scott, M. D.; "To Prevent the Development of Laryngeal Tumors," by J. T. Whittaker, M. D.; "The Prurigo of Hebra," by L. R. Longworth; "Sympathetic Ophthalmia," by E. Williams, M. D.; "Phymosal Paraplegia," by C. E. Beardsley, M. D.; "Fracture at Base of Skull," by C. S. Muscroft, M. D.; "Puerperal Eclampsia," by W. C. Chapman, M. D. The next meeting of the society will be held at Put-in-Bay House, on the third Tuesday in June, 1876, at 2 P. M.

A MANUAL OF BANDAGING. By C H. Leonard, M. D., with over one hundred illustrations. Cloth. Pp. 132. 1876. Detroit: Daily Post Printing House. Price $1.50.

This book is a reprint from a series of articles which have appeared during 1875 and 1876, in the American Observer, a leading *homeopathic* medical monthly, published at Detroit. The book itself represents considerable industry and ingenuity in preparing the illustrations. It could have been improved by tearing out the advertisements at the end before it was bound, as is done in the case of medical journals.

PHYSICIANS' COMBINED CALL BOOK AND TABLET. Devised and published by Ralph Walsh, 324 Four-and-a-half street, Washington, D. C.

This is altogether the neatest and most convenient thing of the sort that we have ever seen Evidently it was devised by a practical physician to meet the needs of the practical physician. It is cordially commended to those desiring a call book or tablet.

BOOKS AND PAMPHLETS RECEIVED.

DISEASES OF NERVOUS SYSTEM—Sixth Edition—Hammond.

TRANSACTIONS OF ARKANSAS STATE MEDICAL SOCIETY—1875–'76.

EXTRACT FROM NINTH ANNUAL REPORT OF THE STATE BOARD OF CHARITIES OF THE STATE OF NEW YORK.

SERIES OF AMERICAN CLINICAL LECTURES—Vol. 2, Nos. 1 and 2.

SIXTH ANNUAL REPORT OF THE N. Y. OPHTHALMIC AND AURAL INSTITUTE—1875.

JOINT DOCUMENTS MICH. LEGISLATURE—1874, Vol. 2.

HOUSE JOURNAL—1875—2 Vols.—Mich. Legislature.

SENATE JOURNAL—1875—Mich. Legislature.

DETROIT

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Original Communications.

ATRESIA VAGINÆ ET UTERI—PRODUCED BY INSTRUMENTAL DELIVERY OF A DEAD CHILD—OPERATION AND CURE.

By Edward W. Jenks, M. D., Professor of Medical and Surgical Diseases of Women, Detroit Medical College.

Mrs. C——, a resident of Northern Ohio, consulted me January 12, 1876, with reference to being relieved by an operation for an atresia vaginæ, which she states was produced by the delivery of a dead child, May 10, 1875.

Succeeding delivery she was confined to her bed for six weeks on account of inflammation of the womb and vagina. Subsequently abscesses formed within the pelvis and discharged externally from time to time up to the date of her visit to me. Three months after confinement there were symptoms indicating the approach of the menses with some constitutional disturbance. A month later there was again the *molimen menstruale,* with increased pain and more general disturbance. The pain was progressingly severe with each return of the menstrual date, and had become so alarming that at the time of her visit to me, she and her husband both earnestly desired that some steps be taken for her relief before the return of another attempt at menstruation.

The lady and her husband were well informed as to the character of her disease and the difficulties and dangers attending an operation for her relief, for they had previously obtained the opinion of an eminent surgeon of their own neighborhood. This gentleman had diagnosticated atresia vaginæ, which fact explained her being able to give the technical name and quite a clear description of her trouble before I had an opportunity of making an examination.

Physical exploration of the generative organs revealed a laceration of the perineum to the margin of the sphincter ani externus. The vagina was closed superiorly, nor could any portion of the uterus be felt in this canal; neither could I by means of a speculum and probe find any trace of the upper part of the vagina in the abundant cicatricial material which obliterated it. It seemed at first as if the vagina was about the normal length and it could be but a short distance to the neck of the uterus, and yet it could not be felt. This state was further explained by a rectal examination. By the rectum the body of the uterus was felt very high, and retroverted, and apparently held in that position by firm adhesion, as if the inflammation had extended to the pelvic peritoneum simultaneously with the vaginal and uterine inflammations. Besides, the vagina was naturally an unusually long one, and its apparent length at this time is explained by still another reason, namely, the excessive size and fatness of the patient, she being five feet eight inches in height, and although she could not tell her exact weight, it was estimated that it would exceed rather than fall short of two hundred and eighty pounds. The abdominal walls, burdened with fat, rendered conjoined manipulation of but little service in diagnosis or in the subsequent operation. The same condition of the labia majora made the vagina seem sufficiently long and rendered ocular examination more difficult than if she had been of average corpulency.

OPERATION.—The patient being etherized, I then, with the assistance of my friend Dr. Johnson, and my pupils, Messrs. Perley and Hibbard, proceeded to operate, as follows: She was put in the exaggerated lithotomy position, after the manner in which Simon of Heidelberg places his patients for the operation of vesico-vaginal fistula. The large vaginal retractors, without the duck bill terminus, each being held by an assistant, exposed the cicatrix. The uterus and pelvic organs were fixed as much as it was possible to do in their case by the firm pressure of an assistant's hand on the hypogastrium. I then hooked up a portion of the cicatrical tissue with a tenaculum, and with sharp-pointed scissors slowly and carefully cut a portion of the cicatrix in the presumed direction of the uterus. I would withdraw occasionally one or the other of the retractors, and with a finger in the rectum, or sound in the bladder, ascertain the safety of my incisions. By taking out both retractors, I found my finger and sound in close proximity, showing the necessity of very great caution lest I should either cut into the peritoneum or the bladder. After cutting through about two inches of cicatricial tissue I reached the uterus, but as there was no indication as to the locality of the os uteri, I separated a portion of the neck from its morbid vaginal adhesions, but the os was not apparent, nor was there anything in the appearance of the enucleated neck to indicate the route into the cavity of the uterus, so I then cut, with a pair of delicate and very sharp pointed scissors, in the direction, as well as I could judge, of the uterine canal for a distance of an inch, when there immediately gushed out between two and three ounces of menstrual blood of a syrupy consistence. The route of the uterine canal being thus discernable, I enlarged the opening still more, by scissors, and cut away the ragged cicatrix from the newly made os. A tent of lint was put in the uterine canal and the newly opened portion of the vagina packed with the same material, when the patient was put in bed. There was during the operation but little blood lost, aside from the accumulated menstrual blood, and when the patient was fully restored to consciousness, she was kept free from pain by moderate doses of morphine, per rectum. The next day the lint was removed and a fresh quantity put in with the finger for the purpose of preventing union by first intention. The patient was quite comfortable and complained of but little pain, and after the removal of the first tampon, there was but little oozing of blood. The fourth day after the operation, word was brought me that Mrs.

C. had a "chill" and complained of quite severe pain in the abdomen. It was several hours before I was able to see her, but when I did, I was gratified to learn that the rigor and pain were simply the ushering in of the menstrual flow, and that she was now free from pain. The catamenial discharge continued five days, as was her former custom. This I considered a happy occurrence, so soon after the operation, as the danger of closure of the wounds, especially within the uterus, was by this opportune discharge greatly diminished. The patient rapidly recovered her usual health, and three weeks later returned to her home. From letters received from her, I learn that menstruation has since been regular and painless; but each time so far marked by a more profuse flow than was her former custom.

In conclusion there are certain points of interest in connection with this case to which attention is directed. *First*, The dangers, as marked by the symptoms, of rupture of the fallopian tubes, or regurgitation of menstrual blood into the peritoneal cavity, if the operation had been much longer postponed. *Second*. The complications from traumatic causes, viz: a retroverted uterus, bound down by peritoneal adhesions, obliteration of a portion of the uterine canal, and locality of the cervix uteri obscured by a great quantity of vaginal cicatricial tissue, to which may be added the difficulties attending any manipulation on account of the size and obesity of the patient. *Third*, The advantage of operating just preceding the regular catamenial date, as was manifested in this case, by the menstrual blood keeping the newly opened canals pervious in a better manner than could be done by tents, or any other device.

REMARKS ON THE PATHOLOGY AND TREATMENT OF PHARYNGO-LARYNGITIS.

By C. H. Tidd, M. D., Geneva, Iowa.

About three years ago I presented a paper on this same subject to the "Meigs and Mason Academy of Medicine," in which I strongly advocated the use of quinine in the treatment of certain affections of the throat and larynx. A more extended experience with this agent, and for *this* purpose, has induced me to again present it to the notice of the profession, not that it is particularly new to many physicians, but with the hope that it may attract the attention of some who have never tried it in affections of this kind. *First,* let us review the pathology of the disease, and *then* the popular methods of treatment, and decide (if we are able) whether the usual treatment is *rational,* or whether it be based upon scientific principles.

The pharynx and larynx each receive their nervous supply from the glosso-pharyngeal and pneumogastric nerves, together with nerves of the sympathetic system; nerves both of sensation and motion. In this affection we have both hyperæsthesia and hyperæmia. Hyperæmia, from paralysis of the vaso-motor nerves, is common, and may, under certain conditions of exhaustion or local irritation, pass on into complete inflammation. This hyperæmia or inflammation is always diffuse.

We have, then, congestion from paralysis of the nervous supply, permitting an accumulation of blood in the capillary vessels supplying these parts, and it is well known that if a vessel loses its power of contractility so that the blood which is forced into it is not expelled, only as the blood from behind forces it out, that the vessel must necessarily be dilated to a greater or less extent; and as a sequence, more blood is retained than physiologically belongs to the part. This state must necessarily induce congestion, which, if not relieved, will soon pass into a state of real inflammation, with the usual symptoms of pain, redness, heat, tension, and swelling. We are well aware that simply hyperæmia is not inflammation; but we are as fully satisfied that a hyperæmic condition, if let alone, will rapidly (by reason of its producing changed and altered nutrition of the vessels and surrounding tissues) pass into inflammation, and be followed by all the usual train of symptoms pertaining to such condition. This stage has usually been reached before the physician is called upon to prescribe; and, as a rule, the treatment consists in ordering a gargle containing chlorate of potassa, hydrochloric acid, glycerin or water, with directions to gargle the throat frequently.

In examining as to the rationality of this treatment, let us enquire what is the first principle in the treatment of all inflammations; surely not such methods as will irritate and increase the difficulty, but rather we should enjoin rest, removal of all irritation, and the reduction of vascular excitement and nervous irritability; and this principle holds equally good in the treatment of the disease under discussion, as in the treatment of gastritis, peritonitis, synovitis, or any kindred affection. If this proposition be true, why is it, allow me to ask, so generally the practice to order irritating gargles to be used in an inflamed throat? Is it humane? Is it scientific? And does it tend to advance the fame of the profession? In all these cases we must differentiate between acute and chronic inflammations, and direct our treatment accordingly. If the case has become chronic, I will admit that gargles may possibly be admissible, on the ground that they promote exudation, and thus afford temporary relief, and open the way for other treatment. Still I am inclined to doubt their efficacy; but in recent cases, I claim that tonic treatment is at once the most rational, and the most efficient. And of all the tonics that we possess, I firmly believe that quinine is by far the best; and I base my views on this fact: Experience has taught me that quinine, when taken in moderate doses, and in any vehicle which does not prevent its coming into actual contact with the parts affected, excites a free secretion of their mucus from the buccal mucous membrane and salivary glands, and this, mingling with the abnormal, thick, tenacious mucus (which is always present, and which excites violent paroxysms of coughing, and tends to increase the irritation already existing) renders it easy of dislodgment, and without nearly the excitement and irritation of the parts that would otherwise attain. The repeated use of the agent keeps up this secretion and tends to prevent that which is secreted by reason of the existing inflammation from becoming thick and tenacious, and so difficult of dislodgment; and as a result of its administration, we find that with each act of coughing the accumulated mucus is readily expectorated, thereby removing the irritating substance, and allowing the parts to heal rapidly, by reason of being kept at rest and quiet. My method of administering it has been in solution, something after the following:

℞. Quiniæ sulph. ....grs. xv.
Glycerinæ puris. ....℥ij
Aquæ puris................................℥j

M. Sig. two teaspoonfuls every two hours, swallowing slowly, and abstaining from swallowing any fluids for at least thirty minutes after each dose.

This for adults. For children I would use doses proportionate to the age. By using it in this way, I have rarely found a patient who would not take it readily, and have even, and frequently, found small children who, after taking one or two doses, would ask for it voluntarily, simply from the fact that the slightly bitter taste was more than compensated for in the almost immediate relief which was afforded. Occasionally have I found a child whose stomach would reject the first dose; in which case I order it to be immediately followed by a second, and never, so far as I can now recall, have I seen the second dose rejected. During the past winter we have had quite a number of cases of this class in this locality, and my treatment, in nearly every case that I have treated, has been with this agent, and my success has been most satisfactory; and in a conversation with Dr. J. I. Leas, of Hampton, during the winter, he related to me a history of several cases which have proven most refractory in his hands; I suggested the use of quinine, as above, which he adopted, and the note from his pen, which I append, will show how the agent has succeeded in his hands:

DEAR DOCTOR—Yours of last evening, enquiring "how my cases of pharyngitis and laryngo-pharyngitis got along, under the use of quinine in solution," is received, and, in reply, I must say that, during a practice of over eighteen years, in which time I have tried many remedies in these cases, I have never found anything that seemed to afford so great relief, and in so remarkably short time. I have found it to be *all* you recommended, and *even more*; and in future I shall always prescribe it in preference to the *old gargles*, or anything else, unless our advancing science shall furnish a better remedy, which I very much doubt. I have now used it in some thirty cases, and always with the most satisfactory results."

Fraternally,

HAMPTON, IOWA, 4, 18, '76. J. I. LEAS.

I might adduce the testimony of others, but deem that enough has been said to bring the matter before the profession, and that is all that is necessary, for I am fully convinced that but a fair trial is all that is required to convince anyone that it is a valuable agent in the treatment of diseases of this class.

THE POISONS GIVING RISE TO THE MIASMATIC ORDER OF ZYMOTIC DISEASES—THEIR RELATIONSHIP.

Paper read before Detroit Academy of Medicine, by Dr. E. L. Shurly.

The question which I have been appointed to present this evening, according to my understanding, is: "The relationship, if any, existing between the poisons giving rise to the miasmatic order of zymotic diseases." In taking the affirmative side of this question (which I feel bound to do) I must necessarily travel much through the nebulæ of speculation; and if I thus pass unobserved any objects of fact, do not impute it to my altitudinous flight, but rather to a want of time for making the proper extensive research which the subject requires.

Before considering, in a comparative manner, the poisons comprehended as causative of these zymotic diseases, we must first ask ourselves what these poisons are? and whence they come? else, how can we discuss their points of identity and disparity? and here, at the first step, do we strike the almost impenetrable boundary of mystery through which naught but theory can guide us. Therefore, as the traveler relies only upon his compass to guide him in his wanderings over the roadless plain, not yet mapped out, so must *we* reply upon theory to guide *us* through this entangled mystery which lies before us.

The universal extent and specific phenomena of these zymotic diseases, as distinguished from other classes of disease, render it probable that their causes, also, are as universal, specific and diffusible; or, in other words, must be organisms, living as other organisms, under the government of nature, and not incidental to the social or climatic condition of man, or to man's infringement of physiological laws, entirely, unless we call his efforts at self-development and civilization an infringement; for, if it were otherwise, these diseases would not present the definite cycles of prevalence and decline, which they do, occurring endemically or epidemically, and attacking persons of varied hygienic or social condition with equal force and character; but would be traceable, on the other hand, to contact or local circumstances surrounding the subjects of them. Hence, we are driven to one of the following conjectures to account for their character, viz: they are either caused by an organic animal virus, introduced from without the body, or generated within; or, by an organic vegetable virus, introduced from without; or, by some extensive telluric or atmospheric poison. As neither time nor the scope of this article will permit a free discussion of the above points, it must suffice to state the ground assumed, and a few reasons therefor. I shall assume, then, for our ulterior purpose, that the proximate causes of the miasmatic order of zymotic diseases are of vegetable origin, mostly invisible, and living, or fungi and their spores. I know that this may be considered, by some, a very wild assumption; but, when we reflect upon the well known characteristics of animal life, or even animal cell life, however prolific in generation, we shall find them incompetent to serve as the cause—*ab initio*—of a class of diseases so rapidly developed, and so rapidly and extraordinarily diffusible over large areas of country; for there are but few instances on record of the extensive diffusion of microscopic ova, in great quantity, through the atmosphere; and those so recorded are supposed to be zoospores—or animo-vegetable compounds, so that, whatever the poison may be, it is clear that it *must be* one capable, so to speak, of being omnipresent in considerable quantity, and this property, probably, does not belong to the animal kingdom. Besides, if these poisons were of animal nature, the diseases in question could be traced in their spread to contagion, particularly, a train of circumstances which we know does not obtain. Again, if these poisons were telluric or atmospheric in their nature, the resulting diseases would be as strictly bounded by certain geographical, geological, or meteorological conditions, as the faunæ and floræ of the globe, which is not the case, since the European as well as the American, and the

Asiatic as well as the African, are alike the subjects of attack. Therefore, it seems necessary for us to seek their origin in the vegetable kingdom, which alone, by its wondrous pollen, fungi, and spores, can furnish the media of dissemination, consistent with our observation of the phenomena presented; and that this, although not absolutely proven, has a good shadow of support, I will, as briefly as possible, endeavor to show.

It is well known to botanists that the production of pollen and sporules is enormous, and that the smaller the individual, and the lower in the scale of organization, the more prolific is it; hence, many of the minutest fungi disseminate millions of spores through the atmosphere, at each fructification, so to speak. Dr. Carpenter states that one individual of the puff ball tribe (*lycoperdon*) sends forth about ten millions (10,000,000) spores, which diffuse themselves in the atmosphere as fine dust; and again, that a single grain of wheat, affected with the bunt, or stinking rust, caused by the fungus *uredo caries*, may contain four million (4,000,000) minute balls of fetid powder; and that spores are constantly in the atmosphere everywhere, is proven, not only by the analyses of air already given us, but by the fact that no decaying organic mass, or any albuminous and saccharine substance—unless positively excluded from all air—can escape being the site of a cryptogamic forest, as it were, spontaneously generated.

That these omnipresent spores are the cause of many of the diseases of living plants is beyond conjecture, and, in illustration, allow me to mention the well known diseases of some cereals, and other plants, such as the bunt, corn mildew and rust, the hop disease, grapevine disease, potato, murrain, as well as many of the diseases of forest trees and garden produce. Even the cryptogams themselves, such as lichens and ferns, are sufferers from other fungi; nor do these fungi spores only attack the outside, for we have a fungus (the *Acrospeira*) inside of the chestnut, and others which gain access through the stomata or roots of plants, to circulate in the sap and remain in the foster plant.

Insects, too, are the habitat of these pests, as the wasp, the silk worm, destroyed in such great numbers by the Botrytis bassiana; spiders, the common house fly, so often attacked in the autumn with a mouldy fungus called Sporendonema muscæ; many caterpillars are thus destroyed, and the pupa of the moth gives a habitat to the Torrubia militaris; bees, and many other insects, which we will not take time to mention, are destroyed, while in full life, by fungi; many of them gaining access to the interior of the body and there developing.

Among the known diseases of higher animals, many are the result of fungi, also, such as hog and sheep measles, sheep small-pox, as has been lately proven, the foot and mouth disease, ergotism, and the cattle plague. Cooke states that at the time of the great cattle plague in England, it was observed that the red fungus (a fungus affecting grasses) was more prevalent than had ever been known before or since. There is an instance on record of a cat that contracted mange from the fungus of tinea tonsurans, with which a child was affected. Farcy and malignant pustule in animals has also been traced to fungi as a cause. That they are not always operating on the outside, I may mention that fungi have been found in the muscles and bones of animals.

Coming to man, we will mention, as instances of fungoid disease, the various skin diseases, such as favus, plica polonica—epidemic in Russia—tinea tonsurans, alopecia, sycosis; the foot and mouth disease of India (mucedine fungus), caused by Chionyphe Carteri; diphtheria, believed by many to be caused by the Oidium albicans, the relative of the O. Tuckeri, which causes the grapevine disease. Camp measles, also, has been attributed by some to the spores from Puccinia graminis, germinating in damp straw or wheat fields. Hospital gangrene and malignant pustule are, by some authors, attributed to a fungus. In the south of Europe, and also in England, dangerous diseases (or fevers) are said to be caused by the inhalation of a black rust which infests the reed, or Arundo donax and A. phragmitis. M. Michel says that these spores, when inhaled by or injected into persons, produce a violent papular eruption on the face and body, with great swelling and constitutional disturbance.

In a case which occurred at the Botanic Gardens, Edinburgh, the assistant botanist inhaled some spores from a dried puff ball (lycoperdon) which resulted in a long and dangerous illness. It will be remembered here, that Helmholtz discovered, in his own case, that a fungus was the cause of autumnal catarrh, prevalent during the haying season.

I will call attention to the disease of stomach, produced by the development of the sarcina and torulæ there, also the disease known as ergotism, with which every physician is familiar; and, lastly, the so-called malarial diseases, which are generally conceded to be due, if not to a fungus, at least to changes in the vegetation of swamps—vegetation undergoing some kind of decay—and this, from being the special nidus of predilection of many fungi, furnishes, to my mind, a pretty strong proof of the nature of the cause, viz: fungi.

Cooke sums up the deleterious influence of fungi on man, the lower animals, and plants, as follows:

"*On Man*—When eaten inadvertently. By the destruction of his legitimate force. In producing and aggravating skin diseases."

"*On Animals*—By deteriorating or diminishing their food supplies. By establishing themselves as parasites on some species."

"*On Plants*—By hastening the decay of timber. By establishing themselves as parasites. By impregnating the soil."

He adds: "That it is not proved that they produce epidemic diseases either in man or animals, or that the dissemination of their multitudinous spores in the atmosphere has any appreciable influence on the health of the human race."

Now, if these spores are everywhere disseminated in the atmosphere, and if they are the cause of so many of the vegetable, insect and animal diseases, by what kind of logic can we exempt man—only a higher animal, breathing the same air, and everywhere surrounded by the same cosmical influences as the lower animals? Then, too, in the case of marsh miasmata, which so promptly and specifically attacks him when on land, and as quickly absents itself when he leaves to travel on large bodies of water, what other explanation remains to account for the nature of it, save fungi?

The poison is invisible, I know, and cannot as yet be demonstrated, but that does not invalidate our theory any more than the invisibility of an atom destroys the atomic theory.

Now, if these ento and epiphyta be the cause of the diseases in question, a general survey of the polymorphism of fungi will readily explain the apparent anomaly of these specific (so-called) diseases becoming in many instances blended.

It will be remembered, in setting out, that the phenomena or symptoms of the diseases in question are nearly alike—for instance, chills or rigors followed by fever, headache, eruptions, etc., mark the invasion of the body by any poison, and hence avail us little in an etiological study—even the paroxysms of intermittent fever, the prototype of miasm, are not sui generis. Therefore I will at once invite your attention to a consideration of the polymorphism of fungi, from which we draw our inferences.

It is now known, or believed, that the number of different species of fungi are much fewer than formerly supposed, many which were described as distinct species or varieties being but temporary forms in process of stagal development—for instance, we have the zoöspore of certain agarics living for a season fungoid on grasses, and being eaten by the horse again deposited with the dung, and the next season developing into the perfect type—agaric (or toadstool). Spores of Puccinia graminis, in the course of their growth and development obtain independent stages which become known as Escidia and Uredines. The Oidinas are stated by Berkely to be only stages of growth of the Erysiphei—these and the Uredines being among the first discovered instances of dualism.

The late Prof. Oersted, of Copenhagen, demonstrated that Podisoma was but a condition in the growth of Roestelia.

Dr. Colan, in the London *Lancet* for last year, states that "there are but few distinct species of fungi, and that several even now looked upon as distinct *are merely stages of growth, and varieties of two or more species in process of development.*

DeBary and Henblow show how easily a stage development may be mistaken for another fungus entirely.

Dr. Carpenter describes two kinds of fructification which the same individual may put forth at different periods of its life, viz: the basido-sporous, by which the spores are developed by an outgrowth (basidia) from free points; and theca-sporous, by which the spores are developed inside of cases (thecæ); and Cook describes two kinds of phenomena grouped under the term "polymorphy." "In one series two or more forms of fruit occur consecutively or simultaneously in the same individual, and in the other two or more forms appear on a different mycelium, on a different part of the same plant, or on a matrix wholly distinct and different. Many other facts and statements regarding the polymorphism or duality of fungi could be cited, but enough I think has been said, to establish this as one of the laws of fungology, and it may be that its application is really more extended than now shown, and that many other so regarded distinct species may prove to be only probationary individuals as, viz: the Oidium tuckeri, which causes vine disease; Ergota abortifaciens; O. albicans, which flourishes, beyond much doubt, in the buccal secretions, in aphthae, diphtheria, and the advanced stages of phthisis; Achorion Schönleini, of honey-comb ringworm, and the white mould of turnip leaves; all, according to Dr. Coulan, of one genus and perhaps of one species. Again, the Botrytis infestans, which produces the potato disease; the Botrytis parasitica, found in turnips; the Botrytis brassiana—muscardine, or silk-worm rot, are also of one family; so, too, are the pucciniæ and uredines, fungi which cause the dust brand or bunt in wheat, mildew in corn, etc.; the same may be said of the common moulds which appear on fruit, preserves, etc. On a piece of bread which I fixed for the purpose, there came up a luxuriant crop of moulds, embracing the Aspergillus glaucus, Pencillium roseum or the pink mould, and the Ascophora mucedo or green mould, all intimately intermixed and flourishing. In a similar experiment with some quince marmalade I found also an admixture of Aspergillus glaucus—*the* white mould of preserves, and the dematici or black mould.

This is but a mite of what the study of fungology reveals on these points, but as time presses, we must leave this tempting highway and go on to what we know about the association and alternation of the miasmatic diseases.

In the first place, allow me to quote from Aitken, touching some of the points just gone over. He says: "The diseases of the lower animals are not sufficiently studied by us. The diseases of plants are almost entirely neglected. Yet it is clear that until all these have been studied, and some steps taken to generalize them, every conclusion in pathology, regarding the nature of the propagation and dissemination of specific miasmatic, and even of parasitic, dietic, and enthetic diseases, must be the result of a limited experience from a limited field of observation. How do we know that the blights of plants or the causes of them are not communicable to animals and man? We know how intimately related the diseases of man and animals are with famines and unwholesome food; and of famines with the diseases of vegetable and animal life, as much as with the destruction and loss of food."

Now, gentlemen, if the theory presented (the germ theory) be true, we may easily explain the intimate association and alternation of the miasmatic order of zymotic diseases with one another, a so-called anomalous phenomenon, but one which we see very commonly existing.

Notice has already been made of the similarity of their symptoms, and now let us add the similarity of their course, for we find the malarial fevers nearly alike in their course and nature, as well as the eruptive fevers, so that their differentiation is not always as clear as could be wished for.

To begin the enumeration of those diseases so intimately associated, either sporadically, endemically, or epidemically, I will cite the so-called malarial fevers, such as intermittent, remittent, and typhoid fevers, which not only follow or precede one another, but actually blend, so to speak, in the same subject. Is there any medical gentleman who has not observed this example? We, also, in our own latitude find examples of this association or blending in measles and scarlatina (Rothlen), measles and pertussis, measles and infectious pneumonia, as well as all the malarial fevers with the eruptive ones.

Dr. Murchison has shown the coëxistence of variola and scarlatina, and of variola and rubeola. Dr. Aitken says that small-pox is never entirely absent from among them, alternating with measles, scarlatina and typhus. Dr. J. T. Brown, of Rochester, has recorded a case of variola concurring with measles and purpura; and further, he says: The coëxistence of variola and roseola or erysipelas; of variola and pertussis; of variola and varicella; of variola and vaccinia; of vaccinia and scarlet fever; of vaccinia and rubeola; of vaccinia and pertussis; of vaccinia and varicella; of rubeola and pertussis; of variola, rubeola and pertussis; of scarlet fever and rubeola; of scarlet fever and enteric fever; have all been more or less clearly shown. Virchow relates a case of typhoid fever combined with striking symptoms of cholera. And I may mention the well known relation between peurperal fever, erysipelas and the other diseases just mentioned.

During the late epidemic of cerebro-spinal meningitis, there were two families in the country adjacent (which I heard of) who had, among different members, cerebro-spinal meningitis and dysentery, the two diseases coëxisting in each family. During a late epidemic of dysentery, at Traverse City, I was informed that many instances occurred of the diseases coëxisting and alternating with the malarial fevers, typhoid fevers, etc.; and I, myself, have observed the same thing.

Bilious remittent fever has been known to prevail with smallpox in the West Indies, as also, yellow and marsh fevers. Everybody, undoubtedly, has observed dysentery, intermittent and remittent fevers prevailing with influenza, and diphtheria prevailing associated with scarlatina, and epidemics of catarrh or common erythematous sore throat are often observed running through a community in company with malarial fevers, diarrhœas and dysentery and erysipelas. Again, various skin diseases are apt to occur when malarial fevers are prevalent; and during the prevalence of infantile cholera we constantly observe a malarial poison associated with it. A medical gentleman informed me that he had seen measles and cerebro-spinal meningitis existing in the same family. And regarding their alternation, every practitioner knows that when whooping-cough or measles is just declining along comes scarlatina, diphtheria or influenza, very often, to roll the ball along. Much more literature could be produced in substantiation of this point, but, as the article is already too long, I must draw to a close, and, in so doing, I wish to call attention to the crowning evidence of the relationship between the poisons of the different miasmatic diseases, and that is quinine. It is this which is known to be so inimical to all the lower organizations; and it is this upon which we rely almost solely as the antidote in all the malarial diseases; it is this which furnishes the formidable weapon against scarlatina; it is this which is our sheet anchor in influenza and dysentery. It is this agent, in short, which comprises our most reliable means for rescuing the human family from the suffering, nay, destruction of all the miasmatic order of zymotic diseases.

This paper, gentlemen, although too long for our brief session, is by no means exhaustive of the topics suggested by the case related the other evening; but, if I shall have presented the matter in a light to elicit research and discussion, I shall feel myself highly honored.

Abstracts from Virchow's Archives.

Prepared for the REVIEW by H. P. V. Petershausen, A. M., M. D., Ph. D.

V.—A Case of Apoplexy of the Spinal Cord. By Dr. E. Goltdammer, of Berlin. Vol. 66. Jan., 1876.)

Cases of hemorrhage into the substance of the cord are of rare occurrence, except those which are of traumatic origin. The greater number of the cases of effusions of blood registered were caused by myelitis, while in nearly all of the remainder there could be found no trace of any inflammation. The latter are therefore generally considered as spontaneous apoplexies, *i. e.*, caused by non-inflammatory malacia. Such a case came under the notice of the Doctor.

The patient, a girl of about sixteen years, was suddenly attacked with a severe pain in her back between her shoulders, which soon passed over to her right, and after a while, to her left arm. She also noticed a pain in the pit of her stomach, and found somewhat later that she could not move her right leg. Having been sent to the hospital, the examining physician found complete paraplegia, complete anæsthesia up to the mamillæ, and paralysis of the bladder, while the reflex action of the lower extremities was still intact; her temperature was normal, pulse 80; did not show any brain symptoms, but complained of pains in both arms. A few days afterwards the abdominal and dorsal muscles proved to be paralyzed, and percussion of the spinal processes of the dorsal vertebræ caused her pain. The pulse was 96; her bowels moved only when drastics were given her. A slimy discharge from her vagina was noticed. The case was considered as hemorrhage into the spinal cord below its cervical enlargement. The treatment consisted in local depletion, in the methodical use of the ointment of mercury and in the use of drastics. The patient, having improved in general very little, died from decubitus about a year after the attack. The most noteworthy observations made on autopsy are the following: The uterus was small; upon the left ovary there was observed a little cicatrix, beneath which there was a yellow-brown substance as large as a pea imbedded in the stroma; about one inch below the cervical enlargement of the spinal cord there seemed to be a compressure of the medulla; a cross section through this part showed that its original diameter was reduced very much, and that the right lateral column and the adjacent parts of the anterior and posterior columns, as well as the gray substance between, were occupied by a rusty brown substance of callous consistence. The microscopic examination of this proved that it was formed of *connective tissue* enclosing fatty matter, crystals of hæmatoidine and a granulated brownish pigment; the vessels in this part had undergone fatty degeneration, their walls were thickened and contained brown pigment; *no nervous elements* could be found in this substance; its entire length was about one-tenth of an inch. The adjacent parts of the medulla were *not degenerated* by softening, only a few rusty stripes and a yellowish color were noticed on their examination; the whole remaining cord was found to be intact. As no symptom speaks for myelitis as a causal element in this disease, it could only be caused by an effusion of blood into the substance of the cord: the latter probably had been provoked by suppression of the menses, for, the heart and the vessels, especially those of the spinal marrow, were intact, and no injury had occurred to the patient. It is true that she stated she never had had her monthly nor noticed any molimina, in spite of her age and bodily development. There were, also, no signs of menstruation noticed during her sickness. But there was revealed by autopsy the presence of a corpus luteum of the size of a pea, and certainly of a longer standing, and a slimy excretion from her vagina was observed a few days after the attack. These facts favor strongly the above mentioned suggestion.

VI.—The Temperature of Peripheral and Central parts of the Body in Diseases combined with Fever. (*Dr. W. Schuelein, of Berlin. Vol. 66. Jan., 1876.*)

The Doctor observed a number of acute diseases in order to find in what manner the regulation of temperature is disturbed under their influence. He carried out his design by bringing the bulb of one thermometer between the first and second toes, where a fluctuation of temperature from 71 to 94° F. was noticed by Woodman, while another thermometer was placed in the axilla. The experimenter's researches confirm in the main Dr. L. Jacobson's observations on the same topic, made recently. His results are as follows:

1. The temperature of the skin is liable to change in healthy persons.
2. The temperature of the skin varies continually and deviates often widely from the temperature of the axilla in typhoid fever, peritonitis, acute articular rheumatism, erysipelas, puerperal endometritis, miliary tuberculosis and cheesy pneumonia.
3. The temperature of the skin rises to the same degree as the temperature in the axilla in croupous pneumonia, measles and scarlatina.
4. In rigors it was found that the sinking of the temperature of the skin coincides with the rising of the temperature in the axilla.

These facts show that the muscles of the vessels of the skin dilate and contract in a number of diseases combined with fever (all sub. 2) in a similar manner as in a healthy state of the body, while in others (all sub. 3) there seems to exist paresis of the muscles of the vessels.

VII.—Changes in the Brain and Medulla caused by Tetanus.

(*Dr. Jul. Elischer, of Budapesth. Vol. 66. Jan., 1876.*)

A woman who had tumbled from the stairs contracted tetanus in consequence of the injuries received. She died twelve days after her unfortunate fall. On autopsy there was found gray degeneration of the posterior column of the cord in its neck and breast portion. In the neck portion of the right lateral column there were also parts of the thickened dura mater having the size of a lens broken up, besides, little extravasations were observed. Both the cord and the base of the brain were hyperæmic.

From his microscopical examinations the following conclusions were drawn by the Doctor: The occurrence of tetanus may be explained by *two distinct classes* of changes—the one is signified by a *hyperplasia* of connective tissue substances, found in all places where nerve roots arise. Besides, the epithelial covering of the central canal of the cord and that of the ventricles were altered in a similar manner. The other class embraces cases which are in a state of continual *regression.* This extends not only over the roots of the fifth and seventh nerves, but over all the nerve roots of the spinal marrow. In some cases there will be found a degeneration of the entire cell. This took place in the nerve cells of the fifth and seventh nerves and of the olivary body, which had undergone *amyloid* degeneration. The Dr. considers this as a change of a more chronic nature. On the other side there were found changes which must be attributed to a more acute process. These may be made visible by carmine, which divides the protoplasm into two layers. One of these unites with the carmine to a striped red mass, while the other does not, but forms a fine granulated yellow mass.

These facts explain that, what we call trismus and tetanus depends upon an *irritative condition of the tissues.* The latter is more of a nutritive than of a formative nature. An injury of the nerve sheaths as well as of the membranes of the brain and cord may occasionally cause this irritation of the tissues. But it doubtless cannot be produced by zymotic infections. Only clinical observations combined with microscopical examinations and controlled by experiments with animals will throw more light upon this subject.

VIII.—On the Hypnotic Properties of the Lactate of Soda. (*Dr. Lothar Meyer, of Berlin. Vol. 66. Jan., 1876.*)

Prof. Preyer's suggestion to produce sleep by substances which bring on tiredness without poisoning the system, induced the doctor to make experiments with the lactate of soda. He did this in the hospital for incurables, where the patients, subjected to his trials, had been brought hitherto under the influence of morphine for the same purpose. At first, hypodermic injections were made, but without being followed by the looked-for results. He then gave the remedy internally about two hours after supper. Next, he ordered it in a better form. The patient received a dose of carbonate of soda, from ʒiiss to ʒv, according to his case, with the direction to dissolve it in lukewarm water and to add of lactic acid to the solution till all the carbonic acid had escaped. This solution was then taken either with condensed milk, sugar or meat extract. At last, the lactate of soda was substituted, upon Prof. Virchow's advice, by lactic acid, which was taken under the form of a lemonade.

As to the result of these experiments, it was found that both the salt and the acid quiet the nervous system in some patients, while in others the preparations interfere with digestion and cause nausea and diarrhœa. Those patients who became accustomed to the preparations, after a while, needed to take then much less of morphine. Only in some instances the morphine may be entirely replaced by the lactates, or by lactic acid.

IX.—On the Cement connecting the Endothelial cells. (*Prof. Jul. Arnold, of Heidelberg. Vol. 66. Jan., 1876.*)

Of late it has been frequently discussed, if there really exists a cement between the endothelial cells. Those who answered in the affirmative were also of opinion that the cement not only connects those cells, but that it must perform, besides, other functions. The more our knowledge of this topic increased, the more were our views on a number of functional disturbances altered. Phenomena, which were considered as taking place in the cellular elements, are now considered as occurring between them and independent of them. The Professor, himself, has added to our knowledge of this subject. (*Vide Review, 1875, page 222 and 407.*)

Though it is proved that white and red blood corpuscles, as well as cinnabar, penetrate the wall of vessels, it was still unknown if liquid substances would do the same, and if so, under what conditions it would take place. The doctor took up this subject, therefore, and arrived at the following results:

Granulated coloring matter, poured into the circulation, penetrates between the endothelial cells. In this manner become not only their cement borders visible, but also the system of intercellular canals, of the perivascular sheaths, and of the adjacent connective tissue. The connection of the endothelial cells is only a loose one. The space between them is occupied by a tenacious substance of liquid consistence, which allows the passing through of granulated or dissolved coloring matter. The position of intercellular spaces changes with the alteration of diffusion and tension in the endothelial membranes. From this follows, then, that the relative position of the endothelial cells is variable.

The stigmata are only separations in the intercellular cement, taking place occasionally, on account of alterations in tension and diffusion of the endothelial membranes. They not only increase in certain disturbances of circulation, but they also enlarge and become real stomata.

The intercellular cement does not merely combine cells, but mediates important relations between the walls of the vessels and their surrounding tissues, as well as between the fluids in the vessels and in the intercellular canals. The nourishment of the tissues depends, probably, upon this arrangement, at least to a certain extent.

X.—Expulsion of a large Gall Stone. (Dr. G. V. Dessauer, in Valparaiso. Vol. 66. Feb., 1876.)

A French lady had previously had several severe attacks of colic. When the doctor was called to see her she had been suffering again for a fortnight from colic and constipation, and had vomited almost everything during the last eleven days. Therapeutics had not influenced her. He noticed the presence of jaundice, and found a rapid pulse. The liver was enlarged, and a tumor of the size of a fist was observed in the lumbar region, while another one of about twice this size was situated near the bauhinian valve. His diagnosis was gall stone colic. The treatment consisted mainly in the application of eleven clysters, each of which contained six grains of opium. These were followed, until the next day, by copious stools, while the patient's state became better. A gall stone as large as a walnut was detected in the stools. Its base presented a single facette. By this the physician was induced to announce the passage of a second stone, which, indeed, occurred two days afterwards. Both stones fitted exactly together; and, if combined, they have the size of a small hen's egg. Before the second stone had passed there were given six clysters, containing, together, thirty-six grains of opium. The patient made a quick recovery, and it is remarkable that no symptoms of intoxication were observed, in spite of the enormous dose of one hundred and two grains of opium administered to the patient within a few days. Prof. Virchow adds: that both stones were sent to him; that they consist of cholesterine and pigment; and, that the bile duct was not dilated, when the stones were passed, but that these must have caused an ulceration of the duct beforehand, followed by an ulceration of the duodenum. He remarks that stones of this size are rarely passed during life.

XI.—*On the secondary development of Cancer in the Diaphragm.* (*A. Rajewsky, of St. Petersburg. Vol. 66. Feb., 1876.*)

Prof. Recklinghausen induced the author to examine under what conditions cancer is spread in the diaphragm. He found that both the lymphatics and the intercellular canals play a prominent part in the secondary development of cancer. The metamorphosis is brought on, either by cancer cells or by cancer juice. In case of cylindrical cancer the regular epithelium loses its attachment and becomes replaced by cylindrical epithelium. The vessels become partly dilated, the epithelial cells increase by division and fill the intercellular canals. The cylindrical epithelium in the cavities undergoes, then, slimy metamorphosis, and, consequently, the cavities become filled by slime. The pressure of the dilated lymphatics causes, at last, atrophy of the neighboring fibres. The peculiar feature in this development is the increase of epithelial cells, which assume a typical form. Such a multiplication does not take place in case of colloid cancer. This spreads rapidly over the adjacent tissues and destroys, soon, the borders of the dilated lymphatics towards the surrounding tissues, beginning with separation and slimy degeneration of the epithelial cells. The connective tissue is the next which undergoes the colloid degeneration.

XII.—*Contributions to the Pathology of the Acute Swelling of the Spleen.* (*Dr. N. Socoloff, of St. Petersburg. Vol. 66. Feb., 1876.*)

The spleen is, according to Virchow, a very sensitive organ, which not only tumefies in cases of intermittents or typhus, but in almost every case in which the blood is infected by various substances. Why this takes place is still unknown. But, as in a number of infectious diseases, there occur similar changes in the lymphatic glands, in which cases those glands tumefy first, which are next to the part primarily affected (as in syphilis, diphtheria of the throat, etc.); we may explain the tumefaction of the spleen as brought on in a similar manner.

To increase our knowledge of this subject, there were examined by the doctor more than forty spleens. These were taken from persons who had died from typhoid fever, pyæmia, puerperal fever, acute peritonitis, diphtheria of the intestines and of the pharynx, endocarditis, scarlatina, croupous pneumonia, etc. The spleen was enlarged in all these cases. But the anatomically demonstrable tumefaction is not always accompanied by the presence of organism in the tissues of the spleen. If they were present, they formed colonies in the blood vessels and in the purple tissue. Besides, they were detected in the walls of vessels, and in a few cases they stood in relation to extravasations. Could micrococci be found, it was only in recently infected cases. As it could not be decided by these examinations, if the presence of micrococci in some infectious diseases was of accidental occurrence, or if they disappear after a certain period, the author experimented with animals, to study the fate of the parasites after their introduction into the body. He found that the tumefaction of the spleen is not always combined with the presence of micrococci, though all the animals were infected under the like conditions. The fact that after a longer period no micrococci could be found, the doctor explains by the rapid disappearance of the parasites. Cases which confirm this view were observed by Lukomsky (in erysipelas), and Obermeier (in recurrent fever). How long the organism might be retained, under circumstances, in the spleen, the doctor could not detect.

Reports of Societies.

MICHIGAN STATE MEDICAL SOCIETY—TENTH ANNUAL MEETING.

Reported for the REVIEW by Mr. A. M. Hawes.

THE annual session of the Michigan State Medical Society opened at the Opera House, in Ann Arbor, May 10, 1876. The President, Dr. Brodie, in the chair. The exercises began with prayer, by the Rev. Willis Hall. The address of welcome was given by the Mayor of Ann Arbor, Hon. E. D. Kinnie. Prof.

E. S. Dunster, chairman of the executive committee, reported the order of business, and in behalf of the resident physicians of Ann Arbor, invited the society to a banquet to be given on Thursday evening, in the hospital pavilions. Dr. Foster Pratt, of Kalamazoo, moved the election by ballot of a committee of nine, to whom all motions and resolutions concerning the medical department of the University be referred without reading and without debate; carried. The following gentlemen were elected members of such committee: Dr. Foster Pratt, Kalamazoo; Dr. J. H. Jerome, Saginaw City; Dr. S. S. Cutter, Coldwater. On motion of Dr. Rynd, the selection of the balance of the committee was placed in the hands of Drs. Pratt and Cutter. While these gentlemen retired for this purpose the report of the committee on membership was taken up. Dr. G. K. Johnson, its chairman, reported several names. Dr. Smith, of Detroit, moved that all names of members of the class of '76, Michigan University, be laid upon the table until the *mooted question* was decided. Prof. Frothingham claimed that the adoption of such a resolution by the society would be going back on its record. It had not in the past committed itself on this question—why should it now? He also claimed it would be an insult to the faculty, as it contained an (unfounded) charge against them. Dr. Hitchcock said that twelve months ago this society was asked to take no action, to let the faculty alone and it would settle the matter, but it has not settled it; what will it now do—wait? Well, the society has waited and we have seen what the faculty will do. This society now proposes to make itself heard. Dr. Frothingham replied: Receive these candidates and let the society be heard. Dr. Smith, of Detroit, asked Dr. Frothingham what would be done with the candidates of the next year and the next. He did not make any charges against the faculty, he simply stated the rumors as they came to him. Dr. Rynd thought that as the resolution of Dr. Pratt already adopted was intended to prevent an exposure of *unclean linen* to the common people, therefore this matter should be referred to the committee of nine. The speaker did not care a fig what action this society took, provided it was honorable. Dr. Jerome thought that the whole discussion was premature, as the report had been laid on the table until the formation of the committee of nine. Dr. Brodie said it had been taken from the table by universal consent. Dr. Jerome thought not; he had not heard consent asked, or he should have objected. Dr. Johnson, chairman of reporting committee, moved to lay the report on the table until the report of the committee of nine on University matters was made. Dr. Hitchcock amended the motion by referring the names of the graduates of '76 to the committee of nine. Dr. Rynd said that while the elements of discord had not been introduced by the *friends* of the *University* he could still, in the interests of peace, support the amendment. The amendment was carried, after some little debate, and the balance of the names voted in. There were three members of the University class of '76 in the list. When the name of Dr. W. Breakey was announced Dr. McLean objected to it and asked that his name be laid on the table, as he (McLean) was going to prefer charges against him of ungentlemanly and unprofessional conduct. After some discussion, Dr. McLean, at the request of Dr. Rynd, withdrew his objection, and Dr. Breakey was duly elected.

Dr. Foster Pratt reported as the other members of the committee of nine on the University matters the following gentlemen, making the committee in full, as follows: Dr. Foster Pratt, Kalamazoo; Dr. S. S. Cutter, Coldwater; Dr. J. H. Jerome, Saginaw City; Dr. G. K. Johnson, Grand Rapids; Dr. G. Chittock, Jackson; Dr. J. A. Brown, Detroit; Dr. J. Hamilton, Tecumseh; Dr. H. B. Baker, Lansing; Dr. J. Andrews, Paw Paw. The report was adopted. Motion to adjourn until 2 P. M. was carried.

AFTERNOON SESSION.

2 P. M., May 10, 1876.

Meeting was called to order by Dr. Brodie. An invitation was read from Dr. S. D. Gross inviting the society to unite with others in sending delegates to the International Congress, to meet at Philadelphia, in September of this year. A paper from Dr. A. B. Palmer, of the University, giving his views on the homeopathic question, was received and referred to committee of nine. Communications from Dr. Beach, of Coldwater, and from Jackson County Medical Association, and others who were absent, in regard to the homeopathic question, were referred to the committee of nine. Resignation of G. W. Foster, who is about to leave the State, was accepted. Committee on membership reported a number of names for membership. Dr. Rynd asked the chair if he was sure that none of them were members of the class of '76. Chair assured him that he would see that none of them were of the class. A communication from Kalamazoo County Medical Society was referred to the committee of nine. The recording secretary made the following report on the membership prior to the present meeting: Active members, 219; honorary members, 3; total membership, 222. He also reported that charges had been made to him against a member of the society for preparing and selling patent medicines, and was accompanied with one of the bottles. The report was accepted, and charges referred to the judiciary committee. A letter from the Boston Society of Engineers, asking this society to unite with them and others in petitioning the Government to take measures to adopt a metric system of weights and measures, was accepted and referred to committee to be appointed by the chair. Chair appointed Drs. G. W. Topping, M. H. Raymond, J. D. Munson.

Report of Treasurer showed a balance in the treasury of $273; report accepted and referred to finance committee. Dr. J. H. Carstens offered the following as an amendment to the Constitution: "Section 7. That four committees, to consist of three members each; one committee on practice of medicine and materia medica, physiology and public hygiene; one on surgery and anatomy; one on obstetrics and gynæcology; one on ophthalmology and otology." An amendment to by-laws, add to Article three the following section: "Section 6. The committee on papers and subjects for discussion shall report the first morning of the meeting, what and by whom papers will be read, stating time for each paper and the time allowed for discussion. Every member desiring to read a paper shall give at least one week's notice before the meeting, to the chairman of the respective committee, stating the subject and time required to read said paper." *Resolved*, that the above be referred to the incoming executive committee. Committee to report at the next annual meeting of this society.

Communication was received from the Medical Society of Washington, D. C., asking this society to unite with them in an appeal to Congress *not* to grant a charter to a so-called National Medical and Surgical Institute. Accepted and referred to a committee of three, consisting of Drs. Carstens, Cox and Christian.

Dr. C. T. Southworth, of Monroe, read a very instructive paper on "Puerperal Fever." After some discussion, Dr. Jerome moved that the paper be accepted and referred to the publishing committee; carried. Dr. Frothingham read a paper on sympathetic ophthalmia. Dr. E. Smith moved that the paper be accepted and referred to publishing committee; carried. Dr. Frothingham exhibited a patient illustrating some features of this disease.

Dr. Jerome preferred charges against Dr. B. B. Ross, of Saginaw, for consulting with irregular physicians; he having said he had done so, and should continue to do, where and when he pleased. Referred to judicial committee.

Adjourned until 7½ P. M.

EVENING SESSION.

Meeting was called to order by vice-president J. A. Brown, who took the chair, and Dr. Brodie delivered the annual address.

Attention was directed to the fact, that for the first time in its history, the society meets at Ann Arbor. He commented upon the demand for a higher grade of medical education, and advised a graded course of three years. He also recommended a form of colonization of inebriates and insane in some manner so that they partially would be able to pay for their keeping. He believed that as only twenty-four students had matriculated in the homeopathic department of the University, that even its friends will find it too expensive a luxury to maintain. He also repeated the time-honored objections to students or practioners devoting themselves to a specialty.

Dr. E. Smith moved a vote of thanks be tendered Dr. Brodie for his address, and it be referred to the committee on publication. Carried. By consent, Dr. Christian read a paper on "Fœtal Monstrosities," in which he gave a record of fifteen cases.

Society now adjourned until Thursday morning at 9½ A. M.

MORNING SESSION.

Dr. J. A. Brown in the chair. Finance committee reported that they find the report of secretary correct, and recommend that he be paid the sum of one hundred dollars for his services. Adopted. The committee on the establishment at Washington, D. C., of a National Medical and Surgical Institute, reported: Your committee report on the protest of the District of Columbia Medical Society in reference to the proposed incorporation of the above institute, beg leave to report that in their opinion we should support the action of the society, and move the adoption of the following resolution:

> *Resolved*, That we protest against the incorporation of the National Medical and Surgical Institute, for the following reasons: First, that there are ample hospital accommodations. Second, there is nothing to prevent the gentlemen from practicing their profession without special privileges from Congress; such an act would simply enrich these men; they would have power to graduate men and give diplomas without restriction.
>
> *Resolved*, That the Secretary be and is hereby instructed to send this protest to our senators and representatives in Congress with the request that they use their influence to defeat the incorporation of said institute.
>
> J. H. CARSTENS,
> E. COX,
> E. P. CHRISTIAN,
> *Committee.*

Dr. D. C. Wade, Holly, read a paper on Etherization, also exhibited an apparatus for producing anæsthesia devised by himself, by use of which he claims that he can bring any person under the effects of ether in three to four minutes, and will not use over one ounce of ether. Dr. Frothingham moved that a vote of thanks be tendered to Dr. Wade, and that the paper be referred to the publishing committee. Adopted. Dr. W. W. Jones, of Toledo, delegate from the Ohio State Medical Society, was invited to a seat on the stage, where he thanked the society for their cordial greeting, and the honor of having been elected an honorary member last year. Paper was now read by Dr. E. Smith, on ocular hygiene; after discussion by Drs. Jenks, Frothingham, Bennett and others, the paper was referred to the committee on publication. Dr. A. Sager being present, was invited to a seat on the stage, where he was received with great applause. Dr. McLean exhibited to the society a patient who had had phlegmous erysipelas, followed by anchylosis of the elbow joint in the straight position, so that the arm was useless. He had performed exsection, and now the man was beginning to get the use of the arm. He considered it a triumph of conservative surgery. Dr. E. W. Jenks, of Detroit, offered the following:

Resolved, That if a surplus remain in the treasury, that a prize of $50 be offered for the best essay by any member of this society. Carried.

Resolution by Dr. Brownell that the secretary be instructed to purchase a book case for the society in which to preserve the society's library. Carried. Adjourned until 2½ P. M.

AFTERNOON SESSION.

Meeting called to order. Committee on weights and measures reported the following:

Your committee have had the same under consideration, and being fully impressed with the desirableness of a uniform standard by all civilized nations, and that the metrical or decimal system has much of convenience to recommend it, therefore we recommend the adoption of the following, and that the recording secretary and president of this society be instructed to sign the same in their official capacity, and send it to one of our representatives in Congress, with the prayer that legislation be had in accordance therewith.

G. W. TOPPING,
M. H. RAYMOND,
J. D. MUNSON,
Committee.

Resolved, That in view of our large international communications, an uniform standard of weights and measures seems eminently desirable, and that the metrical system is one likely to secure such general adoption, besides having valuable intrinsic qualities not possessed by other systems, the Michigan State Medical Society therefore ask that Congress enact a law fixing the metrical system of weights and measures as the sole authorized public standard, said law to go into effect at some fixed period several years hence.

Dr. E. L. Shurly, of Detroit, preferred charges against Dr. A. Kaiser, of Detroit, for allowing notices of his professional services to appear in the *Daily Free Press*. Referred to the judicial committee. Dr. Twiss moved that the society now proceed to the election of officers. After some discussion the motion was carried. Dr. Carstens, moved that a committee of five be appointed to nominate all officers except president. Carried. Committee appointed was Drs. Carstens, Christian, Wade, Shurly and Cutter. Dr. Tupper nominated Dr. Foster Pratt, and Dr. Topping nominated Dr. A. Sager for president. On first ballot ninety-four votes were cast, of which Dr. Sager received sixty-six, Dr. Pratt received twenty-three, scattering five.

Dr. Rynd moved that the election of Dr. Sager be declared unanimous by a rising vote; carried, amid great applause. Dr.

Sager, on account of failing health, wished to decline, but the Society would not accept any declination, and Dr. Brodie notified him that it would elect a vice-president to do the work. Dr. Sager took his seat on the stage amidst loud applause.

The Committee on Nominations reported as follows:

Vice-Presidents—1st, Dr. Foster Pratt; 2d, Dr. Eugene Smith; 3d, Dr. Wm. Parmenter; 4th, Dr. G. K. Johnson.

Recording Secretary—Dr. G. E. Ranney.

Corresponding Secretary—Dr. E. Cox.

Treasurer—Dr. G. Chittock.

Judicial Committee—Drs. Wm. Brodie, C. T. Southworth, F. K. Owen.

Dr. Cox, on behalf of the physicians of Battle Creek, invited the Society to hold their next meeting at Battle Creek. The invitation was unanimously accepted.

The following were appointed delegates to the International Medical Congress to meet at Philadelphia in September: Drs. Eugene Smith, Donald Maclean, Edward Cox, H. O. Hitchcock, C. Shepard, H. B. Baker, Wm. Brownell, H. Tupper, Wm. Brodie for the 9th district.

The following were appointed delegates to the American Medical Society from the Michigan State Medical Society: Drs. Wm. Brodie, I. W. Fisk, R. N. Murray, E. S. Dunster, F. Pratt, W. H. Elliott, E. Lichty, G. K. Johnson, C. T. Southworth, S. S. Cutter, J. K. Thomas, R. C. Kedzie, W. Wood, F. K. Owen, R. Stephenson, J. A. Brown, G. W. Topping, G. E. Ranney, D. C. Wade, J. Andrews. C. H. Lewis, F. M. Oakley, J. P. Stoddard, H. F. Thomas, J. H. Jerome, S. Kitchen.

The committee of nine reported as follows:

To the Medical Society of the State of Michigan:

Your committee, to whom has been referred the various matters affecting the relations of the State society and the medical profession of the State to the medical department of the University, beg leave to report that they have given careful, even anxious, thought to the matter so referred, to the end that, if possible, a solution of existing difficulties may be proposed which, if adopted, shall damage no great interest, sacrifice no honor, nor compromise the dignity of medical science in our State.

The present position of the medical department of the University and our relations to it bristle with difficulties—difficulties springing, on the one hand, from the legal relations of the school to the Legislature and to the Board of Regents, and, on the other hand, from the unwillingness of the profession to hold any parley or make any compromise with irregular medicine.

The controversy arises, as all know, from the establishment by the Legislature and the Board of Regents of a homeopathic medical department (so-called) in the University.

For the better understanding by our brethren in this and other States of the existing "situation," your committee present the following succinct statement of the facts in the history of the movement which has resulted in the establishment of this new (so-called) department of homeopathy.

Before stating these facts, however, it may be well to say that, by the constitution of our State the Board of Regents "*have the general supervision of the University, and the direction and control of all expenditures from the University interest fund.*" This University fund and the students' fees, together, constitute a fund absolutely under the control of the Regents; but, as the University has been expanded and is now managed, this fund is only about half what is required to defray the annual expenditures of the institution. For this additional amount the board are compelled to look to the annual appropriations of the State Legislature; and in making the appropriations, to meet the pressing wants of the school, the law-making power has, from time to time, seen fit to couple its bounty with *conditions*, upon compliance with which, by the Board of Regents, the money could be drawn from the State treasury. In several instances, the Legislature has made use of its power of appropriating money to practically invade the constitutional functions of the Regents, as the controlling power of the institution, and to dictate to them in matters not legally within its sphere.

Beginning in 1855, it passed an act providing for at least one professor of homeopathy in the University.

The Regents refusing to comply with this legislative requirement, the Supreme Court, in 1856, was asked, by a mandamus, to compel its observance. But the mandamus was refused by the court, for reasons, in this instance, not necessary to enumerate.

In 1867, another act was passed appropriating 1-20 of a mill on each dollar of the taxable property of the State, for the benefit of the University, *provided*, the Regents would comply with the law of 1855 and establish one homeopathic professorship.

The Regents agreed to and did appoint *two* such professorships to be located at some point outside of Ann Arbor. But the auditor-general refused to pay the money appropriated on the ground that this was not a compliance with the act. The Regents now asked the Supreme Court, by mandamus, to compel the auditor to the payment of the appropriation. But the writ was refused, the court being equally divided in opinion.

In 1869 a mandamus was again asked of the court, by homeopathic interests, to compel the Regents to comply with the original act of 1855. The court being again equally divided, the request was again denied.

In 1873 the Legislature passed another act, in this instance without appropriation and without condition, providing for the establishment of two professorships of homeopathy by the Regents.

As before, the Regents refused to comply, denying the power of the Legislature to control them in their management of the University.

The usual effort, by mandamus, to compel the observance of the act was made, but this time before the Circuit Court of the county in which the University is situated. The court decided it had no jurisdiction and refused the prayer—also refusing to grant an appeal for the reason that, having no jurisdiction of the case, it could take no action from which to appeal. But nothing daunted, and with a zeal worthy of a better cause, the petitioners again besought the Supreme Court, and were again refused, the court being again equally divided and unchanged in the opinions formerly expressed.

But, in April, 1875, an act was passed authorizing the Board of Regents to establish a new department of medicine in the University—the homeopathic department—and under an annual appropriation of $6,000 for the purpose of sustaining it.

On the 12th of May, 1875, the Regents established a Homeopathic Medical College at Ann Arbor; equipped the new college with two professors—one of practice and one of therapeutics; required five of the former professors—viz: of anatomy, physiology, surgery, obstetrics and chemistry—to supplement the deficiencies of the new department, and to become, with the two homeopathic professors, the teachers of registered homeopathic students, and with this requirement the professors named have complied.

To remove one difficulty in the execution of this plan, the former mode of granting and executing diplomas was radically changed in every department of the University; the diplomas of each department, instead of being granted and signed as formerly by the professors of the several departments, are now granted by the Board of Regents upon certificates of proficiency given to each student of a department by each professor of that department, and are signed "*only by the president and secretary*" of the Regents.

Of the action of the medical faculty in accepting or acquiescing in these radical changes of their relations to the medical department, but little need be said. It has been a subject of much controversy—a controversy which it is now useless to open—and which, if opened, will not aid this society in reaching a just and proper conclusion in regard to its relations to the medical department and its work. It is enough to say that Dr. Sager, of the medical faculty, and for many years its Dean, has refused to approve or accept the amalgamation, and has resigned his position. All the other members of the faculty have remained—whether because they approved or acquiesced in the arrangement, it is not important to inquire; it is but proper to state, however, that no evidence has been produced which shows that, as a faculty, they have relinquished, in any degree, their opposition to the introduction of homeopathy into the institution, but, on the contrary, we have their personal assurances that, while the question was pending in the Legislature, they refused to make any concessions, and when the act was passed and the Regents decided to incorporate the new department into the University, the situation was accepted by them as an "accomplished fact," and without approval or disapproval.

Having thus stated all the facts which seem to be pertinent to our inquiry and which are needed to guide the action of this society, your committee beg leave to offer a few suggestions which grow naturally out of their investigations, and which seem to them to be important:

First—The expansion of the University by the creation of many departments not self-sustaining, creates a necessity for an annual appropriation by the Legislature for their support of about $40,000.

Second—The Legislature or those controlling its action from time to time have taken advantage of this annual necessity to impose conditions not warranted by a true construction of their powers upon the Board of Regents.

Third—The wants of the University and of its several departments not self-sustaining have induced the Board of Regents to yield the long-mooted introduction of homeopathy into the University.

Fourth—The medical department of the institution has been the sacrifice offered to appease the Legislature, and to build up or maintain other departments.

Fifth—That State management of theological or medical schools will, in the nature of things, be disastrous to their welfare, if not actually destructive of their life.

Sixth—That it remains for the medical profession to provide for its own education, and, like theologians, to conduct its own schools and take care of its own interests.

In the matter of admitting as members of this society the medical graduating class of 1876, or members of it, your committee beg leave to say that inasmuch as all, or nearly all, were entered students in the medical department of the University before the establishment of the homeopathic department, and inasmuch, also, as no homeopathic students have been graduated this year, it is recommended that they be admitted members of this society on the usual conditions.

Your committee, in conclusion, beg leave to report the following resolutions:

Resolved, 1st. That we are not content with the existing situation of the Medical Department of the University, because in our opinion it is not calculated to maintain or advance medicine as a science, nor is it consistent with the honor or interest of the profession.

Resolved, 2d. That a State under our form of government cannot successfully teach either medicine or theology, and that the medical profession ought to be its own teacher and the guardian of its own honor.

Resolved, 3d. That we regard all legislative interference with the government of the University as unconstitutional, wrong in principle and harmful in its results.

Resolved, 4th. That section 4 of the constitution of this State Society be amended so as to read as follows, viz: "Section 4. The resident members shall be elected by vote of a majority present at any regular meeting, their eligibility having previously been reported upon by the Committee on admission; *Provided*, That no person shall be admitted to membership who practices or professes to practice in accordance with any so-called 'pathy' or sectarian school of medicine, or who has recently graduated from a medical school whose professors teach or assist in teaching those who propose to graduate in or practice irregular medicine."

Respectfully submitted,

FOSTER PRATT, *Chairman*.
G. K. JOHNSON.
J. ANDREWS.
J. H. JEROME.
G. CHITTOCK.
J. A. BROWN.
H. B. BAKER.

Drs. Cutter and Hamilton gave a minority report, in which they agreed with all the foregoing, except the fourth resolution. The above reports were both accepted. Dr. Tupper, of Bay City, moved that the resolutions be taken up seriatim; carried. Dr. McGraw, of Detroit, moved that discussion be limited to five minutes each, and no person speak but once without special permit from the society; carried. Motion was now made that the first resolution be adopted. Dr. Peter Klein moved that the whole subject be indefinitely postponed; the motion was lost by a vote of 63 nays to 37 ayes. The original motion was then taken up. Dr. G. E. Frothingham said if the society could stand the disgrace of passing such resolutions he could stand their censure; he purposed to kill homeopathy by teaching knowledge and science. Dr. Jerome called him to order, and said it is very manifest that it is the purpose of the minority to fight this question on time; therefore, sir, I move you the previous question. This cut off debate, and the resolution was carried by 63 ayes to 37 nays. A motion to divide the first resolution was lost by a large majority. Second resolution was read, when more discussion took place. Dr. Rynd said it was very painful to him to speak on this question. He asked if the society wanted the faculty to resign and let truth shrink back abashed; we had hoped to come here and receive help and support in our troubles, but it seems we are not to receive anything but censure. He wanted to know if the society was willing to help place the medical department in a proper light before the Legislature, or do you wish to place a stigma on the faculty.

DR. POST—The resolution before the society is not only plain in its statements, conservative in its character, but also free from censure of the faculty; and how Dr. Frothingham, who seems to be their champion, can find in it anything justly deserving his wrath, is more than I can discover. The resolution declares, first, that "we are not satisfied with the existing *situation of the Medical Department of the University*," in its connection with homeopathy. The preamble to this resolution sets forth this relation. Now, sir, we are asked to express our opinion, by our votes, in regard to it. If we are *content* with its present status, it is not only our duty to vote against this resolution, but to be consistent, we must use our influence to promote and perpetuate it; but if we are not satisfied our duty is also plain, to give not only our votes in its favor, but also use our influence to secure the object desired; and, for one, I cannot see how there can be any difference of opinion upon this resolution, even from the arguments of Drs. Frothingham and McLean, for one declares homeopathy in the department "monster" and they have it by the *throat*, and the other, "that the regular profession connected with the college, have done all they could to ward off the calamity." Now, if it is a "monster" in the language of one, and a "calamity" in the words of the other, why are they willing not only to vote that they are satisfied with this "monster" and "calamity" in the department, but also to *denounce* as "ignorant," "bigoted" and "fools" those who differ with them upon this resolution; but one of the gentlemen, to whom we have been accustomed to look for light, declares the proposed action of this convention upon the resolution before us, as "*infamous;*" in what, I enquire? in daring to do what they claim to have done, to oppose the "monster" and deplore the "calamity." It is clear to my mind, Mr. Chairman, one of two things is true, either these gentlemen are fighting some *anticipated* action of this society, upon the fourth resolution of the series, or else they have become so jealous of their laurels in this conflict, that they are not willing that this convention should have even the *honor* of vóting upon it, for surely there is not one sentence, phrase, word, or syllable in the resolution to justify their wrath.

The statement that this complication in the Medical Department is not calculated to maintain and advance medical science, and is not consistent with the honor and interest of the profession, is but a sequence of the existing relation, for it is not possible that grave teachers and regents, who have any real interest in the profession, aside from personal *aggrandizement*, can for a moment maintain that a "monster" and "calamity," in a medical school, can maintain or promote medical science; for you, Mr. Chairman, and gentlemen of the convention, will observe that the resolution strikes only at the complication, and not at the department proper; remove that, and not a medical man in Michigan will falter in his support to the hitherto honored seat of medical learning, *the Medical Department of the University of Michigan.*

But it is claimed by those who oppose this resolution, that they are "educating," pouring light upon this "monster," as they please to call it. "Let us alone," they say, "and we will drive its hideous form from these halls, so long uncontaminated with charlatanism," "that we will free this department from the great calamity." Now, sir, I would like to know how, with the present arrangement in the hours for lectures, established by the Regents, this extraordinary light is to reach the object intended and drive the "calamity" away. All this talk about educating this "humbug" is a *farce* and only for effect on this convention. You can not educate it. The honor of meeting and vanquishing homeopathy is not, as is so often claimed by a *few*, the work of the lecture room; the main victories are not won in that way, for those so lost to reason as to adopt the idea of "*similia similibus curantur*" as the foundation for a medical profession, cannot be reached by argument; no, sir, it is by the bed-side, in private practice by the many, instead of the few, as is so familiarly claimed; it is by the use of a substance in the sick room, *instead* of the *shadow*. Here is where the main victories are fought and won, though never recorded, except in the lives and happiness of the patients—here is where the effectual work is done, though it may never find its way in public print.

There are two parties *united* in their efforts to control the action of this convention upon University matters, to which, before leaving the floor, I wish to direct your attention: We meet them, in your hotels, on the side-walk, and especially in this hall; they approach you with an air of superior knowledge, and say: "Doctor, homeopathy is *established* in the medical department of the University by law; you cannot get it out; it is a fixture; you can't remove it, and why try and destroy the University."

The other party tells us, on this floor: "We have the 'monster' by the throat, there will never be a homeopathic graduate," "let us alone," "let us have peace," and yet the two are united, harmonious bosom friends, sustaining each other, and denouncing all who oppose them; and I must say that a cause that can unite so harmoniously so many conflicting elements, and resort to so many *doubtful expedients*, is unworthy the *support* of this society.

This society is not responsible for the agitation of this question, neither is it true that we are the enemies of the University. If the "old ship goes down" it will be from mismanagement of its *self-styled* friends. If those who have been intrusted with the management of the medical department are not responsible for the present "calamity," surely the members of this society are not, and the threatened resignation of certain members, if this resolution is passed, or, in other words, this "rule or ruin" policy will not deter this convention from the expression of its convictions, either in word or vote; and that men in high places resort to such means to secure their ends, only proves that they are either *unfit* to be *leaders*, or are the advocates of a bad cause.

Dr. PRATT—The gentlemen seem to have forgotten that the resolutions do not censure the faculty, but the Legislature.

Dr. RYND asked if Dr. Pratt would have had the faculty resign; he answered, not at first, but that he would have had them express some public opinion. Dr. Hitchcock said that the faculty had called homeopathy, before its entry into the University, a humbug; but now the State proposes to take the ban from it, and the faculty call themselves missionaries to educate and make it respectable.

Dr. MCLEAN—I would ask if we have not deprecated the *mess;* for my part, and on the part of the faculty we do wish to retain the homeopathic institution, because we have the monster by the throat and can strangle it. This last session nearly disgusted all the students, as well as the two professors. If you will sustain us for three years you will not see anything of it. I am willing to stand or fall by my doings in the University.

Dr. PRATT moved the previous question, and the resolution was carried by a large majority.

Resolution three was read and amended by adding:

"And that a memorial be forwarded to the Legislature, at its next session, stating definitely the position of the State Medical Society on this question; such memorial to be prepared and duly forwarded by the committee of nine, of which Dr. Foster Pratt is chairman."

The resolution was then adopted, with its amendment.

Fourth resolution was then read, but being in the form of an amendment to constitution, according to custom of society, it was laid on the table for one year to be acted upon.

Dr. RYND offered an amendment to the resolution as follows:

"And any teachers now engaged in so teaching shall be excluded from membership."

Moved by Dr. Pratt to lay the amendment on the table; carried.

Dr. PRATT offered the following resolution:

Resolved, That a copy of the proposed amendment of Section four, of the Constitution, ordered to lie on the table for one year, be sent with the entire report of the committee of nine, by the secretary of this society, to each local medical society, in correspondence with this society, with the request that it be carefully considered and acted on in a full meeting, and the result of such action be certified to the secretary of this society, for the information of this body next year."

Carried.

Adjourned until Friday, at 9½ A. M.

MORNING SESSION.

Meeting called to order.

Dr. PRATT offered the following resolution:

"*Resolved*, That this Constitution may be amended in the manner following, viz.:

"The proposed addition or amendment shall be presented in writing, and shall lie on the table for one year, and if approved by two-thirds of the members present at a regular meeting, it be declared adopted."

Accepted and laid on the table for one year, under the rules.

Dr. PARMENTER, of Vermontville, read a paper on continued fevers. Moved that the paper be accepted and referred to the publishing committee; carried.*

Dr. JEROME moved that any further papers be referred to the publishing committee without reading; carried.

Dr. RYND asked permission to read the following communication:

To the President of the Michigan State Medical Society:

SIR—From the standpoint of the undersigned, the action of your association, during its present session, has been marked by a narrowness, bigotry and injustice disgraceful to an honorable and learned profession; without exercising the courage to array itself directly against the University, it has become the agent of a private school to accomplish a virtual dismembership. You do not propose any measures of relief for the State, of medical affairs at Ann Arbor; you simply propose to destroy, when you cannot control, an institution supported by the liberality of our people in your own interests, and for your own ends. You desire its overthrow. You have been ably assisted by the members of the State Board of Health, itself the creature of the Legislature, aided and supported by all the prejudice, bigotry and despotism of past ages. Your conduct during the session has been unfair to a respectable minority. You have tried to cut off the expression and comparison of views, by the tactics of the politician. When the friends of the University honestly asked your counsel, your reply has been a notice of its disfranchisement. Not having any sympathy with the course which you have taken, prefering personal liberty to the despotism of ideas having their origin with the burning of witches, and other humane acts of a similar nature; choosing rather to exercise my personal independence than to remain under the despotism of an association which represents nothing but itself; believing that true science is not the exclusive property of your association, and that its interests are not promoted by an illiberal code, I desire, respectfully, to withdraw from membership in your association."

Signed, C. RYND.

During the reading of this paper it was objected to as containing language unparlimentary and disrespectful to the society, but the reading was sustained by the president, Dr. Brodie.

Dr. PRATT moved that the resignation of Dr. Rynd be accepted and his paper laid on the table; carried.

Dr. F. M. Oakley offered the following resolution:

That whenever the proper authorities shall restore the regular branch of the medical department to precisely the same position which it occupied before the establishment of the homeopathic college, and whenever they shall fully retrieve the present medical faculty of all complicity in responsibility for the teaching of homeopathic students, such action shall be deemed and shall constitute *ipso facto*, a restoration of the department of medicine and surgery to the full confidence and favor of the society. Carried.

Dr. Jenks, chairman of committee on an inter-state medical society, reported satisfactory progress.

Prof. G. E. Frothingham submitted the following:

To the Michigan State Medical Society:

Since a resolution was adopted by this society on the 11th instant, which in my opinion declares a purely commercial policy as its guide, and repudiates the ethical principle of this American code, which makes our profession a self-sacrificing, benevolent and humane calling, and by another resolution the society has virtually declared regular medicine unworthy a position among the sciences, and also a principle which fully carried out would prevent the State from proper care of the health and lives of its citizens, would abolish public medical care of the sick and insane; also all State and other Boards of Health, and carry our civilization, in this respect, back to the condition of the dark ages, I can no longer, consistent with my views of ethics, retain my connection with this society, and hereby tender my resignation of membership, and ask for its immediate acceptance, or such other removal as it may please you to grant.

Signed, G. E. FROTHINGHAM, M. D.

Dr. Pratt moved that the resignation be accepted; carried.

The officers who were elected for the ensuing year now took their seats. Dr. Sager was received with great applause. On motion of Dr. Twiss, the society adjourned to meet next May or June, at the call of the proper officers.

LIST OF NEW MEMBERS.

The following is a list of those duly elected members of the Michigan State Medical Society during this session:

Drs. H. B. Bissac, Milan; W. J. Herdman, Ann Arbor; Geo. Chapman, Hudson; K. Gunsolus, Petersburgh; Geo. Howell, Macon; J. H. Wellings, Lansing; S. Sheres, Westphalia; J. D. Hartley, Ann Arbor; Mrs. S. Hartley, Ann Arbor; J. Kapp, Ann Arbor; B. F. Brunson, Lansing; B. F. Smith, Galien; W. A. Neal, Dayton; Jno. McKeon, Detroit; F. M. Oakley, York; W. F. Breakey, Ann Arbor; Cyrus Smith, Jackson; D. A. Post, Ypsilanti; W. R. Gifford, Erie; E. Batwell, Ypsilanti; S. C. Taylor, Manchester; E. C. Prindle, Dowagiac; L. H. Williams, Bridgeville; I. C. Williams, Jr., Stockbridge; A. F. Hagadorn, Bay City; J. W. Fletcher, Wayne; P. L. Green, Vermontville; P. D. Patterson, Charlotte; E. N. Palmer, Brooklyn; Wm. Aitchinson, Hortonville; O. B. Campbell, Goodrich; C. H. Lewis, Jackson; L. R. Watkins, Allens; C. W. Mead, Dundee; C. H. Lincoln, Armada; C. Ultes, Manchester; S. Dubois, Unadilla; A. B. House, Memphis; T. Morrison, Wayne; S. Fuller, Detroit; J. F. Main, Jackson; B. R. Hoyt, Detroit Junction.

Of the old members, over one hundred were present. We had desired to place on record the names of all who voted yea or nay on the University question, but in some way the secretary's record of the names was lost, and hence we are unable so to do. Perhaps the secretary may find the lost record and publish the yeas and nays in the coming transactions.

Correspondence.

Editors of Detroit Medical Review :

GENTLEMEN—We have read, with much interest, in the April number of the REVIEW, the logical and instructive essay of Dr. C. H. Lewis, touching the history of legislative appropriations to the University, from 1867 to the present date, and showing that notwithstanding the "damaging strife" respecting homeopathy, "that deprived the University, in all its departments, of the aid which it needed," the institution had received, in general and special appropriations, the sum of $344,000 during that period.

The fallacy of this specious pretext having been thus exposed, we would still express the earnest hope that the liberality of the State towards the Institution may not be diminished, except when, as in some of the appropriations of 1875, through the misapplication of the board, the interests of one shall be sacrificed for the benefit of other departments. In requesting the use of your columns we do not propose to touch upon the points so ably covered by the article of Dr. Lewis, but to draw attention to a few of the statements in the letter of Dr. Rynd, bearing more or less of a personal character, or purporting to be a reply to some of our strictures upon the "faculty statement" in the September number of the *Peninsular Journal.*

Refering to the action of the last Legislature on the homeopathic bill with great—we will not say intentional—looseness of statement, he writes : "During the last session of the legislature a bill passed the Senate, but failed to pass the House, making an appropriation for the teaching of homeopathy at some point other than Ann Arbor. Soon after, in direct antagonism to the prominent homeopathic doctor who drafted the original bill, and also against the wishes of a number of his professional brethren, a bill passed both House and Senate, making an appropriation of six thousand dollars per annum, for the teaching of homeopathy at Ann Arbor. The Regents were in no way related to this bill."

This paragraph furnishes, we think, a most striking and melancholy illustration of the shuffling and prevarication resorted to by the originators and supporters of the amalgamation scheme. By a sophistical use of language, "the teaching of homeopathy" he seeks to conceal the fact that in the bill as introduced by Senator Berrick, on the 20th of February, *a complete College of Homeopathy* was contemplated, with a faculty of six members, and with a salary of one thousand dollars each, for a course of lectures of the usual period of four months. On this point, writes Senator Warren : "The original bill, no doubt, contemplated six professors, with a salary of one thousand dollars each." And Senator Thomas writes : "It was the intention to establish a complete school of homeopathy by the bill that passed during the session of the Legislature." And again: "The understanding was, at the time, and I think the bill is plain, that it should be a *separate school* and in no way interfere with the present department of medicine and surgery." Furthermore, by concealing the six thousand dollars contemplated in the Senate bill, and the employment of the phraseology, "soon after *a bill passed*, etc.," he would have us infer that a *new bill* with a different appropriation was subsequently passed both House and Senate. But, on the contrary, the *first* and *only* bill introduced into the Legislature during the session, was that introduced by Senator Berrick, which reads as follows, viz.:

"SECTION 1. The people of the State of Michigan enact: The Board of Regents of the University are hereby authorized to establish a homeopathic medical college, as a branch or department of said University, which shall be located at such place, in the discretion of said Regents, as shall contribute most to its endowment and support."

"SEC. 2. The Treasurer of the State of Michigan shall, on the first day of January, 1876, pay out of the general fund, to the order of the treasurer of the Board of Regents, the sum of six thousand dollars, and the same amount on the first day of January of each year thereafter, which moneys shall be used by said Regents exclusively for the benefit of said department."

This bill passed the Senate on the 13th of April, by a nearly unaminous vote, but was amended by the House on the 21st of April, by striking out the clause leaving the location discretionary with the Regents, and substituting a clause fixing its location at Ann Arbor. This amendment was concurred in by the Senate on the 23d of April. This bill, as will be seen by a glance at the first section, was not mandatory in its character, but left the right of the Regents to accept or reject it unquestioned.

The original Senate bill contained four distinct counts, viz: *First*, Authority granted the Regents to establish a homeopathic medical college. *Second*, Giving them discretionary power to locate it. *Third*, Granting an appropriation of six thousand dollars in perpetuity for that purpose. *Fourth*, Prohibiting the use of the said appropriation for any other purpose.

It must be conceded, therefore, that the *purposes contemplated by the Senate bill*, that were not modified by the House, were *concurred in by it*. Hence, the appropriation of six thousand dollars in the original Senate bill, which was deemed adequate for the establishment of a *complete homeopathic medical college* at some other point, with a four months course, can in justice admit of no other construction, if located at Ann Arbor.

In reply to the statement of Dr. Rynd, that the Regents were in no way related to this bill, we beg to draw the attention of your readers again to the action of the Board on the 17th of February, just three days *prior* to the introduction of *any bill* before either branch of the Legislature, practically *inviting* that body to make an appropriation for that purpose. We quote from the published minutes of the Board, viz: Regent Rynd, Chairman of the Medical Committee, "Would respectfully report that we will, if so desired by the Legislature, manage the affairs of *such* college of homeopathy as *may be established*, to the best of our ability, and use such funds as may be entrusted to our administration for the interest of the cause for which such funds may be appropriated." This report was adopted by the Board and transmitted to the Legislature, and doubtless gave the friends of homeopathy every possible encouragement for the passage of the homeopathic act. We submit it to the judgment of the profession whether the "Regents were in any way related to the homeopathic bill."

If, as Regent Rynd in the same report suggests, an appropriation of five thousand dollars was more than sufficient for the payment of *two* professors for a four months' course, as contemplated in the bill, does not an increase of the appropriation to six thousand dollars fully corroborate the statements of Senators Thomas and Warren that a *full faculty* was contemplated in the original Senate bill? However, disconnected with its history, the bill does not upon its face *suggest*, much less *dictate*, *any* plan of organization. The Board of Regents must, therefore, be held *solely responsible* to the profession, not only for the *details*, but for the *entire plan of organization*, whereby the so-called homeopathic college became a necessary dependency upon the old school, and the faculty of the latter, adjunct, but silent partners in the faculty of the college of homeopathy. (If, therefore, a deep disgrace has fallen on the department it must be through the agency of the Regents and faculty.) But, notwithstanding the admission of Dr. Rynd that the contemplated appropriation of five thousand dollars was more than would be required for two professors, now that the sum has been augmented to six thousand dollars, the same Regent writes, in his letter published in the *Philadelphia Times*: "This grant would not have enabled the Regents to establish a college of homeopathy with a full corps of instructors." This will appear the more remarkable when we consider that the Senate bill granting six thousand dollars originated with a prominent homeopathic doctor, and was deemed not only by him, but by a large part of the fraternity, quite adequate for the support of a *complete* homeopathic faculty. Do they wish us to infer, in view of recent financial embarrassments, that economy is more difficult at the University than elsewhere? Does the payment of one thousand dollars extra, for the ostensible repetition of the homeopathic courses of lectures to *two* female students, serve to illustrate this difficulty? The citizens of Ann Arbor have contributed four thousand dollars towards hospital buildings—could not the homeopaths contribute sufficient to supply the requisite rooms and appliances? For many years the old school faculty furnished their own instruments and other appliances, as means of illustration and instruction—could not a homeopathic faculty, with twice as large a salary, render some assistance in that direction?

In a very fraternal letter addressed by Dr. Rynd to Dr. Pomeroy (homeopath), on the plans and purposes of the Regents in regard to homeopathy, his liberality bursts forth in the following strain: "There is no reason why the University may not be an institution in which *universal* information shall be communicated," thus throwing out a broad hint to the Eclectics, Hydropaths, etc.; and adds, in conclusion: "you are at liberty to convey this information to your people at your meeting. Asking your hearty coöperation, and assuring you of kind regards, I am, etc., C. Rynd." This letter secured for him a *cordial vote of thanks* from the National Homeopathic Convention. The members of the regular profession who support Dr. Rynd, and his plan of amalgamation, and are in accord with the National Homeopathic Association, ought also to have passed a vote of thanks for the services of himself and faculty in that direction. Were they deterred by his recent time-serving denunciation of homeopathy as "*the vilest humbug of the age?*"

On another page, referring to the meeting of the medical faculty with the medical committee, on the night of the 30th of April, Regent Rynd writes: "Special enquiry was made by the Regents for Dr. Sager, and no little surprise manifested at the absence of a gentleman whose long service and great experience might prove of inestimable value in arranging the details of a question so delicate in its nature." His presence and counsel would probably have aided in securing a *plan of organization unobjectionable* in character—a plan, too, which would have obviated the dangers now, in the opinion of Dr. Sager, threatening the very existence of the school of regular medicine in the University." Waving all reply to the affected surprise for the absence of the Dean, which, coming from a physician quite familiar with the cause which led to a relinquishment of active duty for two years previous, is chiefly remarkable for its absence of candor, we beg to remind him that *one, at least,* of the oldest members of the faculty, and who had also for many years held the executive office, Dr. Douglass, *was* present; one, too, who had been his chosen companion in his recent visit to Lansing as a member of the third House of the Legislature; and yet we have not learned that he "interposed any objections" to the amalgamation scheme.

Now, as the Regent was well aware, the alternative plan suggested by the writer, was to make the college of homeopathy *really independent* of the old school, as contemplated in the Senate bill and presumptively concurred in by the House.

But, if the adoption of an entirely different plan could have been secured by the influence of *one* member, who was merely the executive officer of the faculty, what must we be led to infer in regard to the *character and direction* in which the influence of the five members of the teaching faculty, who *were present*, was exerted? Does the admission of Dr. Rynd that "they interposed no serious objections" fully express the character and direction of that influence? Was there not something far more positive than that?

Moreover, what shall we say of the sincerity of any statement from this source, when we read in the letter of Dr. Rynd, in the *Philadelphia Times*, of February 8th, and compare them with the above quotations, such sentences as the following: "The action of the Regents was not in any sense contingent on the opinions or probable action of the faculty." And again: "In a word, my dear doctor (addressed to Dr. Dunster), as you may well know, *the sole question to be settled by the faculty* (at the meeting of the committee) was whether it was wiser *to accept the situation—or step down and out.* The Regents did not propose to offer any *different terms* of settlement, and were prepared to meet whatever emergency might arise."

Now, beside the direct contradiction of this announcement contained in the preceding quotation from the December number of the *Peninsular Journal*, the high improbability that any such supercilious and peremptory menace should have been made to a number of gentlemen who had served the University faithfully, though but for a few years, renders it quite certain, we think, that the statement in the *Philadelphia Times* was written to meet an emergency. It is quite inconceivable that any member of the faculty, even the youngest, should not have possessed sufficient self-respect and sense of manly independence to have resented it, by tendering at once his resignation. But for ulterior purposes it was evidently deemed desirable by the Regent to confound in the minds of the readers of the *Journal* the action of the small committee on the medical department with the action of the entire board, the meeting of which took place a fortnight later. Hence both the regent and the faculty claim, and affect to believe, that in deliberately accepting the "plan of the *committee*" they were accepting an *accomplished fact*, whereas, in truth, by this acceptance of the "plan" they placed themselves in the position of *accomplices before the fact*, as completely as if it had been six months prior to the action of the board. Furthermore, at the meeting of the board on the 11th and 12th of May several prominent homeopaths were present. After reading the "plan of the committee" the following resolution was offered by Dr. Rynd and adopted:

"*Resolved*, That any representatives of the homeopathic medical profession now present, who may desire to be heard on the subject of the *report of the committee*, be respectfully requested to address the board."

This civility extended to the homeopaths who happened (?) to be present at this *special* meeting of the board would seem to admit of but one interpretation—that the medical committee still held their plan open to modifications by suggestions from the homeopaths—the only alternative; *a direct insult to these gentlemen* would seem an inadmissible hypothesis. The character of the discussion that followed leads necessarily to the same inference. But one of the most sensible objections made by one of the homeopaths present, "that the homeopathic school would be like a homeopathic handle to an allopathic jug, and would not secure the patronage of the friends of homeopathy," having been rejected by others on grounds of expediency, the committee did not feel themselves called upon to make any material changes in the "plan" on their behalf. Not a little surprise has been expressed by some who have read the minutes of this meeting of the Regents, that no similar resolution of courtesy was extended to the faculty of the old school, inviting *a public* expression of *their* views in regard to the proposed plan of the committee. But an explanation both true and satisfactory will be found in the fact that these gentlemen were regarded as already pledged, by their acceptance of the plan at the prior *private* meeting of the committee.

Again; to ward off the force of the tabular exhibit in the DETROIT REVIEW of the degree of fusion of the two faculties (so-called), and the consequent responsibility of the majority of the faculty of the old school, under the new regime, for the graduation of homeopathic doctors, he resorts to a piece of shallow sophistry and mere verbal quibbling, to convey the impression that the old school faculty had always been equally responsible for the graduation of homeopaths. Furthermore, he boldly hazards the untrue and quibbling assertion that "the medical department has for the last twenty years graduated *many* persons *with a full knowledge of their being homeopaths*," and that on the strength of the diplomas thus obtained *they have sought*, and are now seeking their introduction to public favor as homeopathic doctors. These propositions we can but pronounce, as a general statement, sophistical and false, and, as a reflection upon the old medical faculty, unjust and calumnious. We repeat what was stated in a former communication, that of the *small* number of those who may, *through rumor*, have been known as disciples of homeopathy, and who may have been graduated as doctors of regular medicine, *not one* ever announced himself officially as having homeopathic proclivities, to the faculty; *not one* ever became a candidate for graduation who did not register himself as a student of regular scientific medicine; *not one* was ever allowed to pass a final examination who had not previously presented credentials showing that he had for the required period of *two years*, pursued the *private study* of regular medicine with a respectable physician of the old school, and had attended at least two courses of lectures at some recognized school of regular medicine. In short, they have been required to comply with every condition required of the most orthodox student; and when the Board conferred the degree of doctor of medicine it was not through the certificates, *as now, of a faculty partly regular and in part homeopathic*, and the diploma thus obtained was not, *as now*, an endorsement of the graduate as a qualified *practitioner of Homeopathy.*

Never, we venture to say, has the most audacious homeopathic disciple and bearer of the diploma of the old school been so reckless as to employ such diploma for the ignoble purpose of an introduction to the practice of homeopathy.

But it is not improbable that in the large classes that annually attended the medical department, cases may have been known to the faculty, in the *same loose and unauthentic way*, of students who, through a long cherished self-delusion, or by long wearing a mantle of moral indifference, falsely inscribed with the sacred name of charity, were found ready after graduating, for a consideration, to consult with *full homeopaths*, in defiance of the code of professional ethics which they have professed to adopt. These might, in accordance with the Regents' quibbling nomenclature, be designated as "*half-homeopaths* graduating." Or, again, there may have been others, who, from a cultivated disregard for the simple logic of truth, had lost all perception of logical distinctions; these might have been designated as "*sophists graduating.*" Or, it is possible there may have been those who, from similar causes of moral deterioration, may have been allowed to graduate under false and fraudulent, or even forged credentials, and to these the title of "falsifiers graduating" would not be inaptly applied; but for the character of such graduates, or of others quite analogous to the Dr. Rynd's "homeopaths graduating," neither the old faculty nor the Regents would have held themselves in any degree responsible.

In view of the facts above stated, showing that an unobjectionable "plan" might have been adopted, we arraign the Board of Regents, and especially the chairman of the Medical Committee, for promoting schism, and encouraging heresy in the regular medical profession, by the misapplication of the legislative appropriation.

We arraign them for imperiling, if not destroying a prosperous department of the University to save one or two thousand dollars per annum for other than the specific purpose of the appropriation.

We arraign them for forfeiting the confidence of the profession, as expressed in recent resolutions of the State Medical Society, which has given the medical department hitherto a true-hearted and generous support.

We arraign the Medical Regents for the use of grossly indecor-

ous language to the representatives of a profession that have hitherto expressed their confidence in and esteem for the department by the most liberal patronage.

We arraign the Regents for having seduced the medical faculty from their paramount allegiance to the medical profession, into acceptance of the position of abettors and direct promoters of the interests of a system of medical humbuggery and imposture.

We arraign the medical faculty for apostacy from the faith of their profession, and for carrying out, without protest, a plan of organization tending directly to destroy a respectable medical school, hitherto having its basis in the confidence of the medical fraternity.

The Regent touches lightly on the "*weakness of the preliminary examination*," as shown in a late article in the DETROIT REVIEW, and although as there shown these examinations for admission are quite inferior to those required for advancement in grade for children of ten or twelve years, in our ward schools, yet he does not even hint at any increase in the requirement, except upon condition that the American Medical Association shall establish a rigid system of preliminary examinations, and make it obligatory upon all colleges enjoying its fellowship. He manifestly declines to assume the leadership among medical colleges in this much needed requirement, and as this object is only attainable through considerable *reduction of class members*, he is quite content to assume the humbler position of follower, leaving to the schools of Canada and the medical schools of Harvard and Chicago the glory of making honorable advancement in medical education, although unsupported by public munificence. But it would seem that it should be considered the chief pride and glory of the department, in view of its connection with the Schools of Literature, of pure and applied science and arts, which make high requirements for admission; to be found foremost among medical colleges, and at least able to claim an equality of position in this regard with the Schools of Natural Science, and of Civil and Mining Engineering. But the Regent kindly informs us in the minutes of the May meeting, 1875, that already several students have been rejected because of inadequate literary acquirements (for schedule of advanced questions see DETROIT REVIEW), and "that it is contemplated to make this work *still more thorough and exacting!*" It is to be regretted the State Society at its late meeting did not renew the inquiry, whether any reasonable efforts had been made to "keep the promises so freely made to the ear" at its last meeting.

Should strength permit, we may resume the consideration of the present status of medical education in the University as compared not only with its history during the past quarter of a century, but also with what the spirit of the times now demands.

Respectfully,
A. SAGER.

Condensations from our Exchanges.

PRACTICE OF MEDICINE AND THERAPEUTICS.

Folliculitis Sebacea.—Dr. F. J. D. Weisse (*Archiv. Dermatology*, January, 1876) suggests the above name as a comprehensive term for all kinds of acne. The following is a summary of his paper:

1. In all so-called acne lesions of the sebaceous follicles a certain degree of inflammation of the follicular wall exists.
2. Folliculitis sebacea would seem to be a much more comprehensive and suggestive generic name for this class of lesions than is the term acne.
3. A deficient ingestion of fats marks the dietary of most patients suffering from folliculitis sebacea.
4. The deficiency of animal oil in the blood of the capillaries of the follicular wall, renders the sebum less fluid, hence stasis of sebum occurs, which, pressing on the follicular wall, irritates it. Inflammation of the same takes place, and hence the several varieties of folliculitis sebacea.
5. The internal therapeusis should be restorative, furnishing fats to the blood.
6. The external therapeusis should be antiphlogistic by the extrusion of follicular contents, douches of hot water, sulphur and camphor lotion, bismuth and chalk powder.

Pityriasis Capitis Treated by Solution of Chloral.—Dr. Martineau (*Bull Gen. de Therap.*—*Lond. Med. Record*, March 15, 1876) says that in his hands chloral has proved very efficacious in treating pityriasis capitis. The strength of the solution most useful is three grains of chloral to a drachm of water. This should be made lukewarm and applied with a sponge to the diseased parts. The parts touched with it must not be wiped. If the pityriasis be recent, a single application will often suffice for its cure; if old, it disappears to reappear later on. The solution of chloral always has the effect of causing a disappearance of the rash and the puritus, so that it is sufficient to continue the lotion in a case of chronic pityriasis until the patient suffers no inconvenience from his disease.

Vegetable Parasitic Diseases of the Skin Treated by Boracic Acid.— Surgeon Major Watson (*Ind. Med. Gaz.*—*London Lancet*, Feb., 1876) reports great success in treating the dermatophyta by boracic acid. He has used it largely in the various forms of tinea, and finds that it acts like a charm. An aqueous solution of a drachm to an ounce, or as much as the water will take up at ordinary temperatures is employed. The affected parts should be well bathed with the solution twice daily, some little friction being used, and it should not be wiped off, but allowed to dry on the part.

Common Tape Worm—Its Treatment.—Dr. Brunton (*London Lancet*) gives the chief points in the treatment of tape worm as follows:

1. A preliminary starvation of twenty-four hours.
2 The administration of a combination of kameela and male fern, namely, two drachms of kameela to be rubbed up with a little gum and water till an emulsion is formed, and then two drachms of oil of male fern to be added, and the whole triturated in a morter with a gradual addition of water till a three ounce mixture is formed, of which half is to be given at bed time, and the remainder four hours later. He had never known this to fail where the drugs were of proper quality.

URINE—ITS RELATIONS TO SKIN DISEASES IN GENERAL.—Dr. L. Duncan Bulkley (*Archiv. Dermatology*, Oct., 1875), in an elaborate discussion of original and collated observations upon the relations of the urine to skin diseases, concludes:

1. The urine represents the state of the blood as well as the integrity of the kidneys, and conversely the state of the secretion from the skin, and is, therefore, of very great importance in the study and treatment of diseases of the skin.
2. The circulation in the blood of excrementitious substances, uric, hippuric and oxalic acids and urea, given experimentally, has been followed by eruptions on the skin.
3. Uric acid is found in the blood of gouty patients, also in blisters raised upon them. It has also been found in the fluid contained in the vesicles of eczema. Urate and phosphate of soda have been recovered from the contents of pemphigoid bullæ in a case of psoriasis. Hippuric acid has been demonstrated in the scales of ichthyosis.
4. Urea is a normal ingredient of the sweat, has been recovered in a notable quantity from the perspiration of a gouty patient in a Turkish bath, and has also been found to be excreted in quantity on the skin in certain fatal cases of chronic kidney disease. Urate of soda has been found crystallized on the skin of eczematous legs in gouty subjects.
5. The rate of secretion of the urine varies greatly with the state of the cutaneous surface, cold applications increasing and warm diminishing it. Daily bathing increases the total solid constituents in the urine, the urea and uric acid being increased. Profuse sweating diminishes the quantity, raises the specific gravity, increases the urates and chlorides. Complete suppression of exhalation by varnishing the skin, causes death from uremia with albuminuria and the production of triple phosphates in different parts of the body.

PHYSIOLOGY.

MEMBRANE OF THE FENESTRA ROTUNDA—ITS MOVEMENTS.—Dr. Weber-Liel (*Monatsschrift fur Ohrenheilkunde—London Medical Record*, March 15, 1876) by a variety of ingenious experiments shows that the membrane of the fenestra rotunda is capable of greater excursion than has been supposed. Further, that it follows easily and quickly all changes of pressure, both from the fenestra ovalis and the tympanic cavity; the membrane is capable of great excursion to a certain point.

A HOG WITHOUT A LIVER.—Dr. E. C. Barrett (*Virginia Medical Monthly*, March, 1876) reports the post mortem examination of a large hog in which nothing remained of the liver but a fibrous network similar to that of a piece of seine. It had died quite suddenly, without any apparent cause, as it had eaten well and thrived. There was no discoloration of the skin, nor constipation; the food appeared to have been well digested; there was nothing to show any disease of any other organ, except an albuminous urine.

CONTAGION AND PUTREFACTION STUDIED EXPERIMENTALLY.—A. Hiller (*Langenbeck's Archiv.—Edinburgh Med. Jour.*, January, 1876) gives the following experimental studies on this subject: He begins by showing how he separated the various micrococci, and cultivated them apart from chemical mixtures. Clearly, if we are to study the influence of organism in disease, we must obtain them separate from all other sources of irritation or disease. He found that when pure water containing the different isolated bacteria were injected daily for nine consecutive days into the subcutaneous tissue or muscles or veins of dogs and rabbits, no prejudicial effect followed. Eighty such experiments were performed, with no greater effect than follows the injection of pure water. Hiller inoculated himself by subcutaneous injection into the forearm, with no other effect than a little œdema.

In his experiments respecting putrefaction, Hiller found that a number of eggs, into which he injected with proper precautions fluid with bacteria isolated from putrefying substances, and into others fluid with bacteria cultivated for the purpose, remained fresh after eleven to fourteen days, but putrefied rapidly when air was admitted. Thus, with Billroth, he concludes that bacteria are in themselves incapable of decomposing albumen by assimilation. He believes that in atmospheric dust, besides bacteria and other living germs, there must be other dead corporeal and organic matter, which constitutes the ferment of putrefaction, which might be either a ferment formed from cells or protein substances in the act of decomposing. This is shown by the following experiment: He poured boiling distilled water on dust collected in his room, and allowed hens' eggs to soak in it, and added it to a solution fit for the development of bacteria, but which contained none. Of the four soaked eggs only two putrefied, one quickly and one slowly, whilst bacteria isolated from the abundant development which took place in the solution were injected into eggs without producing putrefaction. From the fact that the dust infusion itself after several days showed signs of putrefaction, with development of bacteria vibrios and afterwards infusoria, Hiller concludes that atmospheric dust must in fact contain putrefiable substances.

ALBUMINATES FROM THE BLOOD AND MEAT SALTS—THEIR NUTRITIVE VALUE.—Panum (*Nordiskt. Medicinishr —London Med. Record*, April 19, 1875) gives some results of a series of investigations into the nutritive value of blood albuminates and meat salts. He fed dogs on a varied diet, excluding meat, and compared the results thus reached with those gained by feeding animals on powdered albuminous matters, without salts, obtained from the blood by a special process. The chief results are: (1) A certain quantity (about eight per cent) of the powdered albuminates given as food passes away with the excrement, but the remaining part is received into the blood for nutrition. (2) Eighty-four grains of this powder appears to be equivalent, as measured by the amount of urea produced, to 375 grains of dry horse-flesh. (3) Carbon contained in albuminous matter is more valuable in preserving the weight of the body than the carbon in starch or fat. The loss by insensible perspiration is much greater after eating starch or fat than after albuminous matters. When powdered albuminates are compared with a diet of barley and fat, the difference is in proportion of two to one. (4) The addition of phosphate of potash to a diet composed of the powdered albuminates with starch, fat and water, did not increase its nutritive value, as shown either by the production of urea or in preserving the weight of the body. The chief result was that the animal drank more water and lost more by insensible perspiration. (5) A dog may be kept in good health on a mixture of barley, fat, water and common salt, for more than three months, showing that this diet contains sufficient salts. It was also found that the deficiency of salts in the powdered albuminates could be perfectly supplied by barley. (6) The powdered albuminates have a marked effect in augmenting the coloring matter of the blood corpuscles, while this is diminished by a non-nitrogenous diet. (7) It is possible that a certain quantity of phosphates and of potash is a necessary part of food, but this quantity must be very small, since grain such as barley contains enough to compensate the deficiencies of another diet in this respect.

PHYSICAL PECULIARITIES OF THE NEGRO.—Dr. A. W. McDowell (*Amer. Practitioner*) gives the following observations: The pectoral muscles are finely developed, but the lungs are less in weight than those of white men. The liver is larger; the lower bowel and spleen are smaller; enlargement of the spleen did not follow malaria in the negro. The brain weighed less than the white brain, but its size increased with the admixture of Caucasian blood.

SURGERY.

SARCOMATA—THEIR SOURCE, STRUCTURE AND RELATION TO NEIGHBORING GROUPS OF TUMORS.—Dr. Simpson (*London Obstetrical Journal*, Feb, 1876) makes the following concise description of sarcomata. They spring from a connective tissue basis, and may, therefore be found in all parts of the body where areolar tissue, bone, cartilage, skin, mucous membrane and the cognate textures exist. In structure they have an affinity with the tissues from which they take origin, consisting of cells and the inter-cellular substance freely traversed by blood vessels. But they differ from the simpler homologous growths, such, for example, as a fibrous tumour. In that, the development and increase of the cells predominate over the development of the inter-cellular substance, whilst the cells tend to assume distinct forms, and from the heterologous growths, the carcinomata, they differ in that there is a distinct formation of inter-cellular tissue though of rudimentary type, and not a mere infiltration of cells among the pre-existing tissues. The cells present either (1) a fusiform or oat-shaped outline when we have the spindle-celled sarcoma, or (2) they are more distinctly circular when we have the round-celled variety. Sarcomata with stellate cells and with large myeloid cells are found more rarely and only in special situations.

GONORRHEA—ITS TREATMENT—Dr. Minor (*Cincinnati Lancet and Observer*), from many careful observations gives the following conclusions as to the relative value of copaiba and oil of sandalwood:

1. In cases of acute gonorrhea occurring in strong, healthy persons, without any tendency to kidney trouble or gastric derangement, the use of balsam of copaiba will be found more satisfactory than sandalwood oil.
2. In cases of gonorrhea which show a tendency to become chronic, and in which the continuous use of copaiba has caused irritation of the kidneys and gastric derangement, sandalwood oil may be substituted with great advantage.
3. In cases of obstinate gleet, oil of sandalwood in large and long continued doses will, without the aid of other means, completely cure the malady.
4. Sandalwood oil is agreeable to the taste and creates no nausea, nor does it communicate a disagreeable odor to the breath and urine, as is the case with balsam of copaiba.

DANGERS OF BREATHING BY THE MOUTH.—Dr. Guye (*Archiv. fur Ohrenheilkunde—London Medical Record*, March 15, 1876) directs attention to the evils of breathing by the mouth. To appreciate these it must be remembered that the functions of the nose in respiration are threefold.

1. The olfactory sense secures it against the entrance of impure air.
2. The moisture of the nasal passages gives a certain degree of aqueous saturation to the inspired air, the contact of which is thus rendered less irritating to the mucous membrane of the throat and larynx.
3. The inequalities of the organ retain solid particles suspended in the air, which is proved by the quantity of dust sometimes found accumulated in the nostrils. These functions are all lost in breathing by the mouth. Further, the contact of dry air soon produces circulatory troubles in the pharyngeal region, and even an habitual catarrh, susceptible of easy transmissions by continuity to the eustachian tube and cavity

of the tympanum. Granular or adenoid pharyngitis often has this origin. Niemeyer believed that attacks of pseudo-croup in children have their origin in dryness of the glottis produced by oral respiration. To enable the patient to breath through the nose we must restore the nose to its proper condition, and then in children stop the mouth by an impervious respirator. Many cases of catarrhal deafness were cured in this way alone.

Editorial.

Original Articles, Reports of Medical Societies, Observations, Correspondence, News, etc., of general interest, are respectfully solicited from every source. Articles should be practical and carefully prepared.

The Editors will not be responsible for statements made over the names of contributors.

MISCEGENATION IN MEDICINE—POSITION OF MICHIGAN STATE MEDICAL SOCIETY RESPECTING IT.

So far as we are aware, the exact situation of medical matters in Michigan is unique. Hence it has been and is difficult for those at a distance to fully comprehend it. Back of and aside from all mere personal or side issues great principles are at stake. We regret that during the discussion the latter have too often been obscured by the former.

The fundamental proposition before our State Medical Society may be fairly stated as follows:

In matters purely medical—pertaining solely to the relations of physicians to each other, the society must have one *supreme* authority. The society was asked to choose between two masters—the people of the State, as represented in the legislature and Regents, or the medical profession. The choice of the society was made deliberately and in terms which give the clear ring of profound conviction.

In what shape was this question as to choice of masters presented? In the approval or disapproval of the present status of things at the University. After years of opposition the will of the people and legislature have prevailed with the Regents and the medical faculty. The society, after full investigation, found that these bodies were united in promoting the miscegenation of rational medicine and homeopathy. Here and now we wish it distinctly understood that as this is a free country we cheerfully recognize the right of these bodies to do this thing. But when they appear before the State Medical Society, or the profession, and desire its endorsement, we hold it self-evident that the society and the profession have an equal right to give or withhold it.

The society found the medical department of Michigan University in such a position that to endorse it would practically submit the keeping of our professional honor to the people, a thing before unheard-of in the conduct of any scientific or literary profession.

Our State society, with a courage and firmness worthy of the occasion, in substance said, "Medical men alone are competent to be the custodians of our professional matters. Hence we cannot submit to State dictation. You have placed homeopathy in the medical department of Michigan University, but we will not accept such action as ours. On the contrary, we respectfully but distinctly say that such action is adverse to our interests and inconsistent with our honor. If you will restore the medical department to its former position, we will gladly accept its fellowship and cherish its interests. We love the State of Michigan and abide by its laws, but when it transcends the legitimate authority of a State under our form of government and attempts to dictate to us in matters of medicine or religion, we respectfully assert our inalienable right to freedom of thought and action."

We trust that all will carefully read the details of the action of our State society, which we give quite fully in preceding columns. Aside from all other considerations we are desirous that our professional brethren everywhere should be fully convinced of the fact "that the Michigan State Medical Society does not countenance the 'association of regular physicians with charletans without rebuke.'" All miscegenation schemes were repudiated as being both unwise and unjust to all concerned.

One word as to the members of the society. To a very large extent they are alumni of the University, so that the action of the society was really that of the older alumni of the State Medical school. These old alumni, remaining true to the former teachings of their "alma mater," prefer that the school should be abolished rather than become the tool of politicians and charlatans, or the ignoble slave of popular ignorance or prejudice.

In their late meeting (see May REVIEW) at the State Society and elsewhere the alumni have labored hard to save their "alma mater" from degradation and disgrace. They love not their "alma mater" less, but they love professional honor more.

WE have received a circular calling a convention of medical colleges at Philadelphia, on Friday, June 2, 1876. It will be called to order in the hall of Jefferson Medical College, at 11 A. M. The object of the convention is to consider all matters relating to reform in medical work. That decided results may be reached, each faculty of each regular college is asked to send one or more delegates clothed with *plenary* powers to determine final action on every question. Those colleges who do not send a representative are invited to set forth fully by letter to the convention the views it may hold touching the suppression of existing evils and methods of practical improvement.

The movement has received the hearty approval of twenty-four colleges, and the call is issued by members of prominent colleges representing different sections of the country. There ought to be a living organization of the American medical colleges. Unitedly they could more rapidly advance medical education and correct acknowledged evils. We hope the standard fixed by this association will be high, and that no college will be admitted to the association which does not honestly live up to said standard.

MEMORANDA.

In Iceland, one-sixth of the entire population are affected with hydatid tumors, and one-seventh of the human mortality is occasioned by them.

"In the hands of the physician the method of subcutaneous injection of narcotics is a blessing to mankind—in the hands of the laity it is a curse."

Schnabel supports Donder's view, that glaucoma is the combination of symptoms of a neurosis, the increase of intraocular pressure being the result of abnormal nervous excitability.

Dr. Stephen Smith says: "The children die in excess while confined to the nursery, of diseases contracted in and aggravated by the nursery, especially in the tenement houses and in the warm months of the year.

The *Canada Med. Record* says that Montreal has the largest death rate of any city on the American continent; that few cities of the old world, with all their crowding and filth, can surpass it. Its mortality for 1875 was over 50 per 1,000.

The death rate of England, 1870, was 2.50 per cent; that of the United States 1.28 per cent. The rates of insurance in the United States are based upon English tabular estimates of life. The profits of the English companies are good; those of the American immense.

Recent clinical observations have confirmed Prof. Schiff in his belief that treatment of fulminant apoplexy consequent on paralysis of the medulla oblongata, should always be artificial respiration by the bellows, and *never bleeding*. By this method the pressure of the circulation is kept low while the blood is kept saturated with oxygen.

Dr. Lucas, in his work on heredity, says: "The *average of life* plainly depends on locality, hygiene and civilization; but the *individual longevity* is entirely exempt from these conditions. Everything tends to show that long life is the result of an internal principle of vitality which privileged individuals receive at their birth. It is so deeply imprinted in their nature as to *make itself apparent in every part of their organization.*

Sir Robert Christison (*Brit. Med. Jour.*, Aug. 7, 1875) gives a masterly discussion of the past and present systems of medical education as exhibited in the history of the University of Edinburgh. He concludes "that the most efficient system consists of full systematic lectures and auxiliary practical instruction carefully chosen and limited. Such has been the system pursued in the University of Edinburgh, and hitherto this University has been uniformly successful."

Dr. Nelson, in the *Clinic*, Dec. 25, 1875, says: "If a man has really good ability, is well qualified for the practice of the profession, is a gentleman and has some means of sustaining himself outside of the remuneration which he may receive for professional services rendered for a couple of years, more or less, St. Louis (Mo.) is a good place to come to; if he lack these things I know of no better place to stay away from." In Detroit it will require from five to ten years to attain what is gained in St. Louis in two years.

Dr. Wm. B. Davis has been studying the history of the physicians of Cincinnati, O., in so far as it can be gathered from the city directories. He shows that during the past twenty-five years 1,374 doctors have settled in that city, while 1,053 have marched out. On an average fifty-five have come to the city and forty-two have departed, leaving thirteen as permanent residents. Of those who remain, but a fraction achieve considerable success, whilst the majority obtain a bare living. One-fourth of the physicians of Cincinnati receive three-fourths of the receipts of the entire profession.

The *Medical Record* says that the N. Y. Public Health Association offers a very convenient medium for public notoriety to some of its members. A purely medical paper is read by one of the members and then discussed by others, giving their experiences respecting treatment. The meeting being avowedly a public one, advertised as such, and reporters invited to be present, hence the member had the benefit of a double advertisement in all the city papers. Of course the good people of New York would understand that these gentlemen were the leaders in the medical profession on the subjects discussed—the ones to be entrusted with its treatment.

The *London Sanitary Record* gives the following figures as expressing the relative cost of the different methods for watering the streets. The Parisian method of watering by hose from hydrants at every hundred yards of street, costs for introducing $350 per mile, and for maintaining $450 per mile per year. The method for using perforated pipes laid into the line of the curbstone costs for introduction $4,200, and for maintaining $300 per mile. The method of using carts with improved iron vans costs for introduction $350, and for maintaining $220 per mile. The cheapest method is also the best, as experience has abundantly shown.

Book Notices.

Any book noticed herein may be had of E. B. Smith & Co., Publishers and Booksellers, Detroit, Mich.

EXTRA-UTERINE PREGNANCY. By John S. Parry, M. D. Philadelphia: 1876. H. C. Lea. Cloth. Pages 276.

This work is based upon an analysis of five hundred cases of misplaced pregnancy. Its various chapters discuss the causes of extra-uterine pregnancy, the species, the pathological anatomy, the symptoms, the terminations and mortality, the diagnosis, the prognosis, and the treatment. Among the causes of extra-uterine pregnancy are mentioned the following:

(1) Pelvic inflammations, peri and parametritis frequently cause this accident by producing constriction and displacement. (2) Extra-uterine

pregnancy is apt to occur in women who have become pregnant after having manifested an inaptitude for conception, either primarily or after they have borne one or more children. (3) Malformations of the internal genital organs, such as obstruct the ovum in its passage to the uterus. (4) Hernia of internal genital organs. (5) Some of the ordinary uterine displacements may occasionally produce extra-uterine displacements by preventing the migration of the ovum along the fallopian tube. (6) Tumors of the uterus or surrounding organs may produce this accident in a similar way. (7) An unhealed section of the uterus made in the operation of gastro-hysterotomy. (8) Strong emotions occurring during or shortly after intercourse. (9) Injuries or blows in the pelvic regions inflicted about the time of conception. (10) Various diseases of the fallopian tube. (11) Deranged physiological action of the fallopian tubes.

These five hundred cases all fall under one of three species, viz: *Tubal*, *ovarian* or *abdominal* pregnancy. There are four varieties of tubal pregnancy: *tubo-ovarian*, *tubo-abdominal*, *tubal proper* and *tubo-uterine*. Ovarian pregnancy presents two varieties: *ovarian proper* and *ovario-tubal*. Abdominal pregnancy presents two varieties: *primary* and *secondary*.

The pathological anatomy varies with the stage of pregnancy, and the variations are clearly described. Respecting the decidua he sums up the conflicting evidence as follows:

(1) In all varieties of extra-uterine pregnancy a decidua forms in the uterine cavity as in normal gestation, but none surrounds the ovum. (2) The decidua is rarely retained until the completion of gestation and thrown off during false labor. More frequently, if the patient goes to term, it is discharged during the early periods of pregnancy, in small fragments and without producing pain, or else it is expelled *en masse* with symptoms of miscarriage. (3) The absence of a uterine decidua when death has occurred from rupture of the cyst, even in the early stages of pregnancy, is not proof that the membrane has not been formed, but simply that it has been expelled before the death of the patient.

The symptoms of extra-uterine pregnancy are studied under three divisions:

(1) Those before the fœtal heart is audible. (2) Those after the fœtal heart is audible, and those until after the close of spurious labor at term. (3) Those after the termination of false labor or death of fœtus.

Special attention is directed to the symptoms of the first period. In normal pregnancy these follow a definite order, but in extra-uterine pregnancy they follow no plan, but set all order at defiance. The first symptoms occurring during the *first* one or two months of extra-uterine pregnancy that differs from those of ordinary pregnancy is a *sudden violent pain in the abdomen*. It is seated in the hypogastrium, usually worse on one side; woman cannot stand erect or lie stretched out: there is considerable and even profound prostration; surface pale and cool; skin covered with a cold, clammy perspiration, and the pulse small and thready. After a period varying from a few hours to a day or more the pain disappears, and the patient may seem to be nearly restored to health. At intervals varying from a few days to three weeks similar paroxysms recur. The cause of these peculiar pains is probably contraction of the fœtal cyst. (2) Another important symptom during the early stage of extra-uterine gestations is hemorrhage from the vagina. The blood is sometimes dark colored and coagulated. This hemorrhage is due to a variety of causes, as congestion of internal organs, the separation of the ovum from the cyst walls, or the separation of the decidua which lines the uterus. (3) *Vaginal examinations* furnish important information even in the early stages of pregnancy. It will be found that the uterus is smaller than it would be in a uterine pregnancy of the same duration. The uterus will be displaced by a tumor; the tumor is elastic; fluctuates or semi-fluctuates, and by ballottement shows that it contains a solid body floating in a liquid.

The symptoms after the fœtal heart is heard are, in addition to those of ordinary pregnancy, (1) enlargement of the abdomen mainly upon one side, as seen by inspection; (2) the extra-uterine fœtal cyst is fixed in the abdomen, while the uterus of a normal pregnancy is more or less mobile; (3) there is preternatural intensity of the sounds of the fœtal heart or placental bruit; (4) vaginal examination shows that the uterus is not enlarged in proportion to the duration of the pregnancy—a tumor is found projecting into the vagina.

If extra-uterine pregnancy is prolonged until the end of the normal period of gestation, labor may be mistaken for ordinary labor. In connection with this it is important to remember that it rarely ends in rupture of the fœtal cyst. Under the influence of false labor the cyst of a tubo-uterine fœtation has in a few instances opened into the uterus, after which the child was expelled by the uterine effort.

Rupture of the cyst occurs in thirty per cent of the cases. The symptoms attendant on the occurrence are those of violent shock succeeded by those of hemorrhage. Contrary to ordinary expectation peritonitis is a rare sequel of rupture of the cyst—so rare is it that it need not be considered in the decision of any questions relating to prognosis or treatment.

Extra-uterine pregnancy, besides rupture, may terminate in the death of the child after the middle of gestation. It may become encysted, and after undergoing various alterations it may remain as an innocuous foreign body. At other times the fœtus decomposes and is discharged by the sac communicating with the alimentary canal, vagina or bladder, or the formation of an opening on the surface of the abdomen.

The mortality in 499 cases of extra-uterine pregnancy was 67.20 per cent. Of the deaths 52.88 per cent were due to rupture of the gravid cyst.

As to treatment of extra-uterine pregnancy in the first months of evolution, the author, after a candid review of all the evidence, decides that the fœtus should be destroyed. He would prefer the use of electricity as employed by Dr. J. G. Allen, of Philadelphia, or else he would remove the child by section of the vagina with the galvano-cautery, as performed by Prof. Thomas, except that he would leave the placenta *in situ.*

As a whole, this book is a model of clear statement, philosophic thought and rigid analysis. With infinite patience the materials were collected, studied, assorted and finally shaped so as to speak their true meaning. This was the author's* last work for the profession which he both loved and honored.

Insanity in its Medico-Legal Relations. By A. C. Coloperthwait, M. D. Cloth. Pages 76. 1876. J. M. Stoddart & Co., Philadelphia.

The author says that his "endeavor has been to produce a work which, while it may be very brief, will contain those essential facts relating to the pathology and diagnosis and the legal relations of insanity, which should be familiar to every physician, and the knowledge of which is of absolute necessity to him when called upon to testify in courts of justice."

It seems to us that he who should depend on this book alone as a preparation for testifying as an expert in court would be very unwise. At the same time many points of interest are well stated.

The Medical Jurisprudence of Insanity. By J. H. Balfour Browne, Esq. Second edition. With reference to the Scotch and American decisions. Cloth. Pages 700. 1876. Philadelphia: Lindsay & Blakiston.

The study of insanity is of special interest to the professions of law and medicine. A lawyer necessarily studies it in its relations to the statutes of the country; a physician in its relations to bodily structure and functions. The practical relations of the insane to the sane often compel the lawyer and physician to meet and discuss the facts and principles relating to special cases. Thus the statement of general principles of law, by a lawyer, will be a profitable study to physicians. Such, in brief, is the book before us. The most characteristic feature of it is that the abstract principles of law are arranged with regard to *responsibility* and *capacity* in relation to actual illustrations drawn from the facts of defect and disease." In order the following topics are discussed: Capacity and responsibility, causes of insanity, classifications of insanity, amentia and its legal relations, mania and its legal relations, moral mania, complete and partial, and its legal relations, melancholia, dementia and its legal relations, epilepsies and their legal relations, somnambulism, drunkenness and its legal relations, aphasia and aphonia, delirium, lucid intervals, feigned insanity, concealed insanity, the admissibility of the evidence of the insane, examinations of persons supposed to be of unsound mind, medical experts and proof of insanity. Reference is made to all important cases which have been decided in England, Scotland and America. A few quotations must suffice to illustrate the author's style and views.

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* He died of phthisis March 11, aged 34 years.

Referring to the fact that society commonly ascribes insanity to any individual who perpetrates a crime unusually shocking, he says that a careful examination of all cases of horrible murders will convince anyone that the mere atrocity of the crime is no indication of the mental condition of the criminal. This popular view has caused much misunderstanding as to the real nature of responsibility. "In many eyes human life is not sacred, and there are innumerable instances in which it has been sacrificed with the utmost recklessness. In some eyes the only life that is sacred is their own; and to save themselves or to procure for themselves some joy or advantage they are willing to sacrifice the lives of others, and these feelings, although to a high-minded man they seem abominable, unnatural and insane, are nevertheless in these persons natural and healthy instincts." To protect society from such persons law exists. He strongly approves the "present legal tests of sane citizenship and punishability" as just and in every respect abreast of contemporary science. Further, he thinks that when duly explained no better tests could at the present time be laid down. "The English law holds one insane in the eye of the law and irresponsible if he did not know what he was about, if he did not know that the act done was contrary to the law of God or of the land, if he had not the power of volition over his own acts."

The causes of insanity are classified as predisposing and exciting, physical and moral.

Respecting the influence of civilization upon insanity, he says that the roots of insanity are deep in the past; the vice, the indiscretion, the overwork, the one-sidedness, the narrow-mindedness of our ancestors not only made the history of their own times but is making the pathology of ours. All the tendencies of civilization which go to produce excessive demands before the organism has been formed by many calls to meet such strains are to be regarded as bringing about those conditions which are favorable to disease. Sex has no influence as a predisposing cause of insanity. Does religion predispose to insanity? Dr. Browne says "that religion, in its fullest sense, and as patterned after the life of Him whose name is connected with the creed of England, is calculated to predispose to the most perfect mental health; that it is necessary to that perfect health, and that the human mind finds in that creed, when it is thoroughly understood and earnestly believed, the most thorough and perfect guide to a life of soberness and chastity, faith and well-doing, which are the very conditions of health in the individual practicing according to these rules, and of its transmission to those who are to come after him."

Among the exciting causes of insanity he calls attention to malformations of the brain, defective development or arrest of growth, to starvation, exposure to intense pain, extreme fatigue, apoplexy, palsy, epilepsy and convulsions.

"Strong emotions and passions, every circumstance in mental life which is calculated to make a deep impression and appropriate a large amount of the free mental energy, may upon occasion become a cause of insanity."

The classification adopted is in its main features the same as that of Esquirol. As a whole the book meets a great want in both medical and legal professions. Written in a clear and attractive style, and printed in large type on good paper, it will doubtless be eagerly sought for and carefully studied.

A TREATISE ON SURGERY. By T. Holmes, M. A., Cantab-surgeon to St. George's Hospital. Sheep; pages, 960. 1876. Philadelphia: Henry C. Lea.

We began our examination of this work feeling that there was no need for it—that it could fill no place except by crowding out an equally valuable book. Holmes's system of surgery, consisting of a very able series of treatises on the different portions of surgery, Gross's enormous text-book, Erichson's surgery, Brant's, Druitt's, Hamilton's—two works—and Ashhurst's surgery, all either new works or recently appearing as new editions, seemed to fully and satisfactorily occupy the field. Having completed our examination, we are forced to say that in many respects it demonstrates its right to exist.

The illustrations are more than four hundred in number, are mostly new, prepared expressly for Dr. Holmes from specimens contained in St. George's Hospital museum. This selection displays a wise teacher's judgment as to the needs of the average medical student.

The discussion of the principles of surgery is always clear, and as concise as is consistent with their fair presentation. Details of the practice of surgery are necessarily condensed in the greatest possible degree. In many parts only enough is presented to prepare the student to enter upon the study of separate treatises on these parts. The chapters on ophthalmic surgery were prepared by Mr. Carter, an accomplished ophthalmic surgeon; those on the ear by Mr. Dalby, an able aural surgeon. We cannot avoid the conviction that the time has arrived for text-books on surgery to omit the chapters on the eye, ear, skin, diseases of women and syphilis, and possibly some others. It would doubtless be a great thing for a surgeon to be a complete master of the details of these equally with the other branches of surgery. Indeed, many surgeons are so conceited or self-deceived, as to imagine that that they know *to perfection* all of these branches, and in addition are a little better medical practitioners than those who confine their attention to medicine solely; yet, experience has abundantly proved to outsiders that no man can be equally a perfect master of all the details of surgery and medicine. Dr. Holmes showed his honesty and self knowledge by obtaining the competent services of Mr. Carter and Mr. Dalby in preparing chapters on the eye and ear. Still, would it not have been still better to have referred the the student to Mr. Carter's work on the eye, and Mr. Dalby's on the ear?

The material embodied in this book is not mainly a simple compilation. True, the work of other surgeons and investigators finds a place here, but not until it has been thoroughly digested and assimilated by Mr. Holmes. Hence we have his ripest experience and most matured thoughts. Our only regret is that he did not occupy the entire volume thus, and leave to younger men the task of compiling a pure text-book. It may be of interest to give his views on some disputed questions.

Of Lister's antiseptic method of dressing wounds he says that perfect immunity from traumatic fever follows this method more frequently than any other method. "However putrefaction is produced there can be no question that carbolic acid amongst other substances stops it." Antiseptic dressings are of especial value in hospital wards where numerous wounds are collected together. The general principles which "govern the dressing of wounds in England are to place the edges of the wounds in accurate and easy contact with no strain on the parts composing the flaps, and no undue pressure on those in the neighborhood, to provide adequate exit in a dependent situation for the products of inflammation, to give as much support to the parts as will assist in maintaining them in apposition, and finally to protect them from air." In regard to sutures he holds "that if an adequate exit as a drainage tube has been provided *from the first* for the discharges, the sutures can hardly be retained too long; they keep the parts in easy contact and obviate the necessity for the constant reäpplication of strapping. I have often treated cases of amputation to the end without removing the sutures till the patient left the hospital, and the stumps so formed have generally been the most satisfactory." This does not apply to any part where the marks of the sutures would be objectionable. As to the material of sutures, silver is best if they are to remain long in; silk if they are to be removed soon after the operation; catgut if it is desired to have them useful for a little time, and then melt away without withdrawal. On the question of blood poisoning, after giving various views, he says that the practical fact to be remembered is "that the same precautions which will prevent the development of bacteria will hinder the formation of the poison." Concerning the effects of long continued suppuration he accepts the views of Dr. Dickinson, that such suppuration does produce waxy degeneration of internal organs, and thus indirectly cause death. The source of an incurable suppuration should be removed whenever it is possible.

TREATISE ON THE DISEASES OF INFANCY AND CHILDHOOD. By J. Lewis Smith, M. D. Third edition, enlarged and revised. Pages, 724. Leather; 1876. Philadelphia: Henry C. Lea.

A comparison of this volume with the previous edition shows that a smaller type has been used and the size of the page enlarged. Hence an equal number of pages contain more matter. A considerable portion of the work has been re-written to bring it up to the actual state of our present knowledge. Several diseases omitted in previous editions are treated at length in this. The author's unusual facilities for the clinical study of this class of practice, enable him to entertain more precise and positive views than would otherwise be possible. Perhaps the greatest value of the book rests upon the realism thus imparted to it.

Among the diseases here for the first time considered by Dr. Smith are rötheln and cerebro-spinal fever. His experience during the recent epidemics of these diseases in New York city rendered it fitting for him to place on record his own observations and reflections. The article on diphtheria has been remodeled to accord with recent observations and experiments. The subject of lactation is fairly and fully presented. Attention is directed to the fact that fresh milk should be alkaline, but that certain states of ill-health or the use of certain articles of food render its reaction acid. He quotes Mayer's observations on the milk of cows to prove that certain articles of food do render the milk acid.

The different ingredients of milk vary according to the diet. "If the diet is poor the amount of water increases, and that of butter and casein diminishes." The effects of diet, including the different kinds of food and drink, need to be more carefully studied. Enough is already known to prove that in this way it is possible to greatly alter the nutritive value of milk. Were our knowledge more definite and exact, we might hope to so alter the milk as to meet special needs of the nursing child. No allusion is made to the effects on the milk of the use by the mother of ale, porter, etc., etc. The habit of using one or more alcoholic drinks by nursing women for the purpose of increasing the flow of milk is very common. In so far as we have been able to learn, the effect of such drinks in healthy women is no greater in increasing the flow of milk than are equal quantities of water. Solid food, vegetable or animal, constitute the material from which the solid elements of milk are formed, the water contained in the food and drink the serum of the milk. We can find no evidence that alcohol of itself increases the quantity or improves the quality of milk. The increase observed after the use of drinks is clearly due to the water by which the alcohol is diluted. Such at least seems to us a fair deduction from a consideration of all the facts bearing on the matter, in so far as they have come to our notice.

As to the amount of breast milk required by the infant he estimates it at from one to three quarts daily, according to age of infant, etc. Respecting the clothing, he believes that as a rule the chest and abdomen of the infant should be so covered with flannel that there is no danger of producing chilliness by a sudden reduction of external temperature or exposure to a current of air. In winter the flannel should be thick, in summer thin. Even in the hottest weather the abdomen should have a light flannel covering. In this way many cases of laryngitis, bronchitis and diarrhœal affections might be avoided.

Concerning the causes and nature of diphtheria he says: (1) Diphtheria is a local malady in its commencement, in most instances occurring from lodgment of the diphtheritic poison at some point upon the mucous membrane, or upon the skin denuded of its epidermis, or upon an open sore. When thus localized it may by proper local treatment applied early be cured, and the system remain unaffected. (2) When diphtheria has a local commencement, infection of the system occurs by absorption of some morbid product through the absorbents or capillaries, or both, which connect with the seat of the disease upon the surface. Concerning the nature of this substance there is much difference of opinion. The following are some of the theories: that it is a peculiar virus; that it is bacteria; that it is a septic poison absorbed from the inflamed surface, and not different from the poison in ordinary septicæmia. (3) Acute cervical adenitis and cellulitis producing tumefaction along the neck are of grave import in diphtheria, since they show that the poison has entered the lymphatics, and infection of the system is inevitable. (4) There is little doubt that the diphtheritic poison sometimes enters the system through the lungs in inspiration. (5) In whatever way the virus enters the system, it is specially attracted to the fauces, and therefore pharyngitis is commonly its earliest symptom and most severe local manifestation. (6) The sputum of a diphtheritic patient and bits of diphtheritic pseudo-membrane may communicate diphtheria.

The treatment recommended is both local and general. Locally he applies with camel's hair brush to the fauces every two or three hours the following mixture:

℞.	Acid Carbolic	gtt. vi–x.
	Liq. Ferri Subsulphatis	ʒ iii.
	Glycerine	℥ i.

Mix.

If the nose be affected, the same solution diluted one-half is applied into each nostril. Internally quinine is given in doses of one or two grains every fourth hour. Each hour a teaspoonful of the following mixture is administered:

℞.	Potas. Chlorat	ʒ i–iii.
	Tinct. Ferri Chlorid	ʒ i.
	Syr. Simplic	℥ iv.

Misce.

If the case progresses favorably, these remedies are employed less frequently in three or four days, but they must not be discontinued till the inflammation has abated. Dr. Smith believes that quinine will act as a preventative in children who are exposed to this poison. As a whole, we think that to the American student no other single work on the diseases of children has a greater value.

MORTUARY EXPERIENCE OF THE MUTUAL LIFE INSURANCE COMPANY OF NEW YORK FROM 1843 TO 1874.

This elegantly executed volume is of great interest to all who are engaged in the study of human life—especially those who base their business enterprises on general estimates of its length. This volume contains the preliminary report, as prepared by G. S. Winston, M. D. and E. J. Marsh, M. D. The report covers a period of an entire human generation, and embraces over 100,000 insured lives, with family histories, habits, occupations, and other interesting points of vital statistics. It is impossible for us to give any fair idea of the analysis by tables, diagrams, etc. A few points must suffice: Consumption was a cause of 20 per cent of the deaths. The report of the Board of Health of N. Y. city for 1871 gives the percentage of deaths from this cause in adults as 30.17 per cent—one-third greater than that of the insurance company. A colored diagram interested us especially as showing the tendency of many diseases to either increase in frequency with age, or decrease. Thus, consumption causes 34.20 per cent of deaths from 18 to 29 years, 25.06 per cent from 30 to 39 years, 17.43 per cent from 40 to 49 years, 9.18 per cent from 50 to 59 years, 4.62 per cent from 60 to 69 years, 4.73 per cent from 70 to 79 years. Diseases of the nervous system increase with age. The deaths from alcoholism were chiefly among foreigners. Deaths from nervous diseases give the greatest percentage among the Scotch, and the smallest among the Irish.

We shall look with great interest to the final report upon these 100,000 lives. It is to be hoped that in some way these reports may be made accessible to those desirous of investigating this subject.

BOOKS RECEIVED.

MEDICAL AND SURGICAL MEMOIRS—Joseph Jones—Vol. I.

DISEASES OF THE SKIN—Dr. H. Piffard.

PATHOLOGY AND MORBID ANATOMY—Green.

ZIEMSSEN'S CYCLOPÆDIA OF THE PRACTICE OF MEDICINE.—Vol. IV. Diseases of the Respiratory Organs.

DETROIT

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INFLUENCE OF THE MIND UPON THE BODY.

Read before the Detroit Academy of Medicine, February 22, by N. W. Webber, M. D.

OF late, the mutual relations of mind and body are better understood than formerly, and as a consequence many of the phenomena which result from this union have, in the light of this knowledge, been stripped of the marvelous, to be recognized ever after as the simple sequence of certain conditions. The antecedents of these phenomena have been the subject of much discussion, some claiming that they arise from natural causes, that they are inevitable, that born in man as a part of his constitution there is no escape from them. Others claim that there is a self-determining power, controlling, modifying, or destroying both antecedent and sequent, substituting something baser or nobler in its stead.

The first says: "I am what I am—a creature of necessity;" the second, "I am what I make myself;" and then again, such men as John Stuart Mill say, "although our character is formed by circumstances, our own desires can do much to shape those circumstances, can modify our future habits or capacities of willing." Orthodoxy in religion and science has so long taught us that for "man so noble in reason, so infinite in faculties, in apprehension so like a god," to be affected by his externals, to surrender his judgment, and succumb to the trickeries of his imagination, is something beneath and unbecoming the dignity of one possessing those faculties.

Whatever may be the case with a normal mind, if such a one exist, we cannot say, but I think the fact is recognized that there is no one with such a perfect mental equilibrium as to be unaffected at all times and under all circumstances by his surroundings; that his self-determining power is, under certain circumstances, weakened. In some persons this happens rarely, and in such a slight degree as to be scarcely perceptible; in others, so frequently and so markedly as to destroy all free moral agency and render the person so changed little better than an imbecile or a lunatic. The charlatan, if not understanding this condition of the human mind, has unconsciously taken advantage of it, and often with such marvelous results, as at last to open the eyes of the scientific observer and compel him to recognize its potency. The intolerance of dignity has too long hampered us in our investigations, and placed us too often in the relation of the hare to the tortoise in the race after truth. If disease can be tricked out of its territories more successfully by the subtleties of diplomacy than by the grape and cannister of pill and potion, the victory is just as great and the spoils of an unexhausted, unravaged system still greater. If the human mind in its symmetrical development can be so invigorated as to control the function of every organ of the body, mold it into its normal shape, and harmonize it with the whole, it is important that we understand it; and again, if from inherited or acquired weakness, the mind can be worked upon as upon the battery of the telegraph, responding to every touch in disturbed functions, among the tissues of the body, it is still more important for us to know that. How does the mind in the vigorous healthy display of its energies affect the body? All of us have, with all our admiration for the beauty of the innocence of childhood, been more than repaid for its loss in the development of a still greater beauty, indicating mental growth and activity. The soft, smooth skin and graceful curves of puerility have been replaced by grooves, and furroughs and angles, that tell that thought has harrowed up the soil, and that intelligence is the product of its cultivation.

The bones of the skull have ossified and attained their full size at or about twenty, but the instrument of the mind incased within those unyielding walls has not attained to its maturity until about forty. The cultivation of the possibilities of that brain not only reflects itself in beautifying to its highest type the countenance and body, but it produces an actual change in the shape of the head, not only as a whole, but also in particular and distinct regions. Elam mentions the case of a friend who had two casts taken of his head at the interval of several years, during which time he was entirely devoted to artistic pursuits, which he had adopted late in life. The contrast between the two is very striking in the development of certain parts of the forehead and parietal regions. What is true of individuals is also true of nations, as may be seen in the change of shape of the skull of the Magyar race, who are a branch of the great North Asiatic stock, and who, since their expulsion ten centuries ago, have changed their type of cranial conformation from the pyramidal or Mongolian, to the elliptical or Caucasian. This is the result not of intermarriage with Europeans, but of culture and intellectual growth.

The probabilities are, that the different types of mankind which have been designated by the shape of their skulls would never have existed had their civilization or intelligence remained the same. Dr. Carpenter gives figures of different skulls of Englishmen preserved in the Museum of the Royal College of Surgeons, presenting some of the characteristics of the pyramidal and prognathous types. In a mixed crowd of persons of Caucasian blood similar deviations can be discovered, and in these deviations we recognize the various degrees of intelligence.

As regards the effects upon the bodily health of a rigorous cultivation of the brain soil, there has been considerable diversity of opinion. Some contend that hard, protracted study is hurtful, undermining the constitution, and rendering it a prey to all kinds of disease; while others are of the opinion that brain work, intelligently prosecuted, is not only uninjurious, but absolutely conducive to good health and longevity.

The shattered constitutions that have resulted from the attempts at a high development of the mental powers have been found where originally the soil was poor, where from some inherent defects the powers of endurance were very much diminished, and where the same results would have attained in the course of time from natural causes.

Elam, taken from Dr. Madden's "Infirmities of Genius," has tabulated a list of natural and moral philosophers, sculptors and painters, authors on law and on medicine, and in their attainment of years we find them averaging 75, 70, 69 and 68, while we find that such familiar names as Franklin, Lowenhoeck, Newton, Goethe, Le Sage, John Wesley, Voltaire, and Rollin, all lived earnest, energetic brain workers to eighty and upwards. The great havoc that is made in the lives of our merchants and business men from nervous diseases is due to worry and fretting, and not to mental work. Very many of this class are men of limited education, with little or no mental discipline, exuberant or depressed with the rise or fall of stocks, presenting a brave front in fair weather, but in foul, if protracted, fuming into apoplexy or driveling into dementia.

The influence of the mind in warding off, controlling and curing disease is well known and appreciated by the intelligent physician. In epidemics, it is an unquestioned fact that the mortality list is very largely increased in consequence of the moral panic that results. The mere mention of cholera will blanch the cheek of many, and this class, when subjected to the epidemic influence of this disease, are the very first to succumb to it. On the other hand, a cheerful frame of mind, engendered and sustained by an indifference to epidemics, generally results in an immunity from the disease prevailing.

Should the disease attack such an individual, the same moral equilibrium will most often carry him through successfully. Not only is this principle correct as regards acute diseases and epidemics, but it is also correct as regards protracted chronic ailments, when exerted in the wrong direction, or in speedily curing them, if in the right.

The history of miraculous, of magnetic, or of spiritual cures, brought about in answer to prayer, or as the effect of some specific power resident in the humbug who performs it, is simply history repeating itself, and these have their counterparts in the "royal touch," Perkins' tractors, the weapon ointment, and other kindred nonsense that has flourished and died out in the past. That these things are, and have been, proves that the large mass of mankind is capable of being deceived; that they seek to be deceived, and that they will be deceived. It is, however, unquestioned that the nervous diseases in which these agencies have such a potent effect have too often a veritable existence, and it is perhaps the fault of the regular profession that they have made too light of them, or have not been so assiduous in their relief as the exigencies of the case demanded. Our modern civilization has multiplied the symptoms of nervous disease, and in its manifestations it is so multifarious that it is difficult to tell where the imaginary shades off and the real begins. Local organic diseases are mimicked with a truthfulness that is bewildering, calling for the most critical examination to detect them, and, if detected, they can only too often be recognized as a symptom instead of a disease—a symptom of nervous derangement. We have hysteric joints and spines, hysteric aphonia, paralysis, cough, pain, and many others, where it is very difficult to tell that they are hysterical. All of us have had to do with one or the other of these various manifestations of a faulty nervous system, recognizing some of them, perhaps, as exaggerated cases of actual disease, which, ordinarily, would attract no attention, and others as perfectly visionary. Paget says of this class of sufferers that they love to be cured with a wonder, and they often pass out of the hands of the careful scientific physician unbenefited, to be cured with *eclat* by some audacious worker in mesmerism, or vendor of patent oil. This class of cases can not be set down as altogether imaginary, or at least not as fraudulent. The pains and aches they suffer are veritable realities to them. They have nursed these pet joints, weak spines, or paralyzed limbs, until their whole mental life centers on the diseased point—exulting, unconsciously, perhaps, in their martyrdom. Something as attractive to their minds can only usurp their disease, and the flattery of special Divine interposition, a marvelous cure, or the inexorable necessities of sick relatives, fire, or a lost fortune, will do the deed. The early history of medicine is so interwoven with mythology, astrology, magic, witchcraft and humbuggery, that the small amount of wheat is almost lost in the vast quantity of chaff; and as theology and medicine, in those days, went hand in hand they mutually supported and confirmed each other. So amulets and charms, as they protected from and cured disease, proved the truth of the religion in whose service they were used. This superstition is not entirely rooted out in the present day, for the test of the truth has been, and is, made on these grounds.

Spiritualism, Protestantism, Catholicism, Mohamedism, and many others, have claimed to be the only *ism* from this evidence of Divine favor. The effects of the mind in modifying, ameliorating, and curing disease, is so well known to the intelligent practitioner that the marvelous and apparent miraculous is divested of all that is surprising, and proves no more for the creed of the Christian than for that of the heathen. All such evidence to prove the truth of any religion, and all such evidence offered as being supernatural or Divine, is injurious to the cause or creed it attempts to bolster up. Quackery, which is antithetical to all that is pure and good, can boast of more that is miraculous, in the common acceptation of the term, than all the creeds together. Physiological discoveries, additional appliances, and scientific competition, have done much during the last twenty years for the relief and cure of the sick, but I believe that nearly, or quite as much, has been done by this power of mind upon the body. This influence has in a great measure been produced unconsciously by the physicians, yet none the less effectually. When we predict that a medicine will produce specific results, our expectations are generally realized. In this prediction we assist the virtue of the medicine by producing an expectancy on the part of the patient. Physiological experimentation has taught us that mercury has no effect upon the liver, and could we impress this fact upon the minds of our patients, the hepatic secretion would diminish with every dose of this potent remedy, notwithstanding the observation of years has taught the contrary. Physicians are given to riding hobbies sometimes, and the reason that unbiased observers are so often unhorsed over the same ground is, that they are less assured in their sitting, and fail to secure a reciprocating expectancy on the part of their patients. The reason one physician secures such results from a remedy as to give it the name of specific in certain ailments, while another can only secure negative results, is often on account of the different modes of administering it. The first says: "You take this medicine every three hours, and to-morrow you will be all right." Another will say: "If you are not benefited by this, when I return, I will change it for something else that, I think, will do you good." On the same principle, one doctor is successful in practice, while another, with perhaps more ability, may fail. The first is decided, and wins; the second vacillates, and loses. The confidence of merit that secures its reward in the true physician becomes inflated assurance in the quack, and too often the increased circulation of the one satisfies the masses as well as the true ring of the other.

A majority of the sick will get well if left alone to their own unaided recuperative powers. A certain proportion of the balance will recover or die in proportion to the skill displayed in their treatment, while the remainder will inevitably die under any treatment. The first class are in a great degree responsible for the various forms of quackery and over-medication. They insist on having their ailments doctored, and their requirements are met and the demand supplied. From this class the material for many a wonderful cure is furnished, and as there is often a rivalry as to who can furnish the severest sickness, with its dismal concomitants of aches and pains, to groan and sigh over, so also is the same passion manifested in the means and manner of cure. From the second class, where skill and experience are needed to conduct to a happy issue, an occasional recruit is furnished the ranks of the quacks. Very many imposters are men of ability; their volubility is great; their powers of persuasion are immense, and as they cater to the weak points of their patients for the sake of gain, they succeed sometimes where the more conscientious fail.

Like the electro-biologist, they suggest that they are recovering, induce an expectancy which overpowers the physical disability, and recover they do. Many of the phenomena of magnetism and spiritualism can be accounted for on the same principle. A state of expectancy is induced in the susceptible so great as to overshadow the common sense of the individual, and they see, hear, feel, and smell, whatever is suggested. Dominant ideas, in the same way, take such possession of the mind as to produce bigotry and intolerance, and anything, no matter how absurd, in the line of thought or consistent with this possession can be made a veritable reality. The hermits and *recluses* of old, living in a continuous atmosphere of piety, their minds filled with the thoughts of heaven and the angels, had these thoughts and feelings reflected back in visions that to them were real. Preoccupation of the mind by certain thoughts will color almost any sense impression to correspond with those thoughts, although the connection between the two may be most absurd: so that ghosts, voices, odors, etc., are produced under the most dissimilar and opposite conditions. The imitative tendency is so strong in some as to overcome the will power and produce phenomena strange and wonderful. The dancing mania of the fourteenth and fifteenth centuries is a striking example of this kind.

Many other phenomena, strange and peculiar to the unreflective, under the examination of ordinary common sense, degenerate into the commonplace, and impress upon our minds the truth, as expressed by Dryden, that

> Our reason was not vainly lent,
> Nor is a slave, but by *its own consent.*

PROPHYLAXIS AGAINST SMALL-POX.

Read before the Detroit Academy of Medicine by Dr. C. C. Yemans.

We have small-pox as an epidemic in our city. All possible precaution has been taken, but yet the disease is prevalent.

With the disease all physicians are supposed to be familiar. Our main study is its prophylaxis. Small-pox being contagious, isolation is imperative and vaccination advisable. I shall not in any way discuss the disease or treatment, but simply write with some reference to its contagiousness, and concerning vaccination. Sporadic cases, so called, are met with quite frequently which cannot give any history of contagion. One member of a family may go through with the disease, and no other member of the family be infected.

A patient who had been confined in a ward of St. Mary's Hospital for three months, from a fractured femur, broke out with small-pox and died, no other case having appeared there for three years.

Some years since, a vagrant in Wyandotte came down with small-pox, and slept one night in an old log house, which house was abandoned, and for three years thereafter was used for a sheep pen, when another vagrant, coming that way, slept in the sheep pen, and in due time broke out with the disease. As a rule, our cases can give no history of infection, and this again adds to the difficulty of diagnosis. When a lad in a store, a fellow-clerk had small-pox. I nursed him through, sleeping on the same bed at night, and yet I escaped, and no one in the same employ was infected. I was sent for in haste, recently, to see a patient who was suffering from symptoms of small-pox, yet he could give no history of infection. Now, whence come these sporadic cases from which we sometimes have epidemics, even if actual exposure to small-pox virus be necessary? I do not know one who does not think it necessary. Persons are supposed to carry the poison from the sick-room. Physicians especially are supposed to spread the disease by carrying virus from one patient to another. Hence great care in properly disinfecting ourselves is so necessary. Clothing, furniture, burning of infected articles are dangerous agents. Greater precautions seem to me to be necessary, and *then* there are dangers against which we cannot guard ourselves or our patients; I mean the carrying power of animals, domesticated and otherwise.

A dog may be on the bed of, or even fondled by a small-pox patient. The same dog may in a little time be in some distant part of the town or city playing with other persons. Or the dog playing with another canine may send a message to some unsuspecting person far away. Cats, which are not excluded from the sick room, may be carriers of danger as well. In many houses of the poor, beds are on the floor; old mattresses in houses where rats congregate, and even hide in the bed among the straw. These houses are connected with remote residences by sewers, drains, etc. When winter comes, the rodents leave the colder open fields and river front and seek houses and barns more warm. Any person who dwells in an old building will call to mind this fact. I believe they may carry contagion with them as they wande.. Against the former (*i. e.* domesticated) we may guard ourselves, and even against the latter in new and well constructed houses. An eccentric practitioner in Cleveland, Ohio, said: "A skein of silk thrown into the street from a small-pox patient may cause an epidemic."

I account for some sporadic cases by the carrying facilities of some animals. The board of health of some city in England, now afflicted with small-pox, has caused the domesticated animals to be restrained.

There is no specific for small-pox, and we are confined to two things—isolation and vaccination. Unfortunately the former cannot always be secured.

How about vaccination? Let us remember two things while we advocate general vaccination:

1. Even small-pox epidemics have an end, which ought to cause us to be modest in our claims for the eliminating power of this treatment.

2. The onset of any epidemic gives us the more grave cases, either by selecting the more susceptible or otherwise.

We are also taught that the disease itself is less virulent than in former times, by Jenner's discovery. Of this I am not assured, for so many conditions favorable, preventive and medicinal, exist that I am slow to admit the truthfulness of even this statement.

I have treated over two hundred cases of small-pox, and, while I cannot find the figures, I am confident that over one-half who came under my care, by no means the milder cases, had marks of so-called "successful vaccination," and of those who died the same may be said. The last patient whom I saw had a large scar, well pitted. His attack was as severe as any I have attended, so much so as to mislead me in diagnosis possibly for two days. His screaming could be heard for one block, and full doses of anodynes scarcely relieved the agony. This man died within one week from his first symptoms. I do not doubt but an examination of patients at the pest-house will verify what I have said. On the other hand, the only protection I have is vaccination, and I have been saturated in small-pox practice. I have no doubt many members of this society are in same condition. Why this disparity? In discussing vaccination, we are too general indeed. All is not proper vaccination which causes a pustule and leaves a scar. We may have a furunculus from poisonous matter, and not any vaccinia. Thus a person may be all the more unprotected from thinking himself safe—that is to say, all vaccination is not vaccination. I cannot here discuss best methods or best material, but only give a dogmatic assertion. Bovine virus, or humanized virus but one remove from the ox, should be used.

We meet persons who fear vaccination only a little less than small-pox itself. This comes from a notion held not alone by the laity. I once heard one of our profession say: "I have known a case of itch *scabies* to be transferred through vaccine virus," which is about as well founded as many notions concerning the possibility of propagating anything less than phthisis by vaccination. Secondary syphilis occurred in Charity Hospital from the careless or uncleanly use of an instrument in rapid vaccination, which was disastrous to the child. Now, I have no doubt but blood, or epithelium, or debris, may be transferred from one person to another containing specific poison, and this, it seems to me, is all that can be claimed.

I submit this paper with diffidence .for your criticism, as I believe much harm is done by unscientific use of the only efficient prophylactic in this loathsome disease.

Dr. Gray, of the Utica Insane Asylum, says that he has yet to see a case of insanity which could clearly be traced to religious excitement as its cause.

POISONING BY OIL OF RED CEDAR. (OL. JUNIPERI VIRGINIANÆ.)

By D. C. Holley, M. D., Vernon, Mich.

A FEW days, or rather months, since, Mrs. W., wife of a farmer living near this place, supposing herself enceinte, and thinking she would put a veto upon babies in her case coming quite so thick and fast, swallowed half an ounce of oil of red cedar about ten o'clock at night, just as she went to bed. A few minutes after going to bed she told her husband she felt very strangely; her eyes to her felt as if bursting from their sockets, and her head as if enclosed with an iron band. A slight attempt at emesis ensued, and a very little of the oil was vomited; twitching of the muscles was observed, and in a few moments more a most violent convulsion came on, and all further consciousness on her part for the next twelve hours was lost. Convulsion succeeded convulsion in rapid succession, until within two hours she had eleven. We were summoned to her bed-side about one and a half hours after the poison was taken. We gave her immediately an emetic of sulph. zinci. and ipecac, thinking perhaps some of the oil might be still in the prima via unabsorbed. Free emesis quickly ensued, and a portion of the oil came up with the contents of the stomach, as evidenced by its characteristic odor and the oil floating on the surface of the matter ejected. There was only a slight abatement, however, in the rapidity of the recurrence of the convulsions—none whatever in their violence. As soon as the action of the emetic subsided, we administered chloral hydrate and bromide of potassium, each xx gr. in cinnamon water. Sinapisms were applied to nucha, feet and epigastrium.

The convulsions now ceased and did not return; the chloral and bromide were continued, however, once in two hours, in doses of ten grains each for the remainder of the night. She lay apparently in a deep comatose sleep until about nine o'clock the next day, when she awoke to perfect consciousness with no recollection of what had occurred since swallowing the oil. She made a good recovery. So far as the pregnancy was concerned, it probably did not exist in the case at all, as there was no evidence at the time of any abortion occurring, or, in fact, of any uterine action being induced by the oil; and time, the great revealer of secrets, has failed to show subsequently anything of the kind. And now we can point you to one family in our vicinity at least who will never again attempt to commit criminal abortion by administering oil of red cedar.

VERNON, June 5, 1876.

Original Translations.

REMARKS ON THE CLIMATE AND DISEASES OF COSTA RICA.

By Dr. C. Schwalbe.* Abstract from "Deutscher Archiv. fur Klin. Medicin.", by Dr. H. P. Von Petershausen, New York.

THE little republic in which Dr. Schwalbe makes his abode is divided into three regions by two mighty mountain ranges running through the country from north-west to south-east. The one towards the Pacific ocean is composed of ancient unstratified rocks, and its slope towards the ocean is of considerable steepness. The second chain runs nearer the Atlantic ocean. It is formed of a number of volcanoes, from 7,000 to 12,000 feet high, and presents towards the Atlantic a slope even more abrupt than that which the other chain presents towards the Pacific ocean. These chains enclose the plateaus of St. José and of Cartago. This central region is highly cultivated and occupied by luxurious coffee, sugar and corn plantations, while the regions of the Pacific and of the Atlantic slope are covered with extensive primeval forests.

The climate of the region of the Atlantic slope is distinguished by great regularity of temperature, constancy of direction of the wind, constancy of relative humidity of the air, and lastly, by the absence of a well marked dry period. In the harbor of Limon there is a mean temperature of 79° F., whereas the maximum is 89° F. and the minimum is 70° F. The barometer ranges between 750 and 755 mm.; the relative humidity fluctuates between 100 and 73 per cent; the number of rainy days is about 200, and the amount of rain is 100 inches. Those periods during which it rains uninterruptedly for a week or longer are called "temporales." The wind has all the year a northeasterly direction.

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* Dr. Schwalbe practiced medicine in New York city before he went to Central America, where he then lived for years as a physician in Costa Rica. He subsequently became also acquainted with the sanitary condition of the Isthmus of Panama, the West Indies, and some of the harbors of Brazil. His views on the climate and its influences on diseases in those tropical regions are therefore based upon his own observations, and as reliable accounts of this kind are seldom published, a summary of them will probably have some interest for the American physician.

From this the physical condition of the Pacific slope differs considerably. The yearly medium of the temperature is only 74° F., while the maximum is 86° F., and the minimum is 65° F. The number of rainy days is less by 50 than in the region of the Atlantic slope, hence the quantity of rain is only from 70 to 80 inches. There prevails a strong northeastern wind during the dry season, while its force decreases so far during the rainy season that local sea-winds take its place. Besides, the daily oscillations of the temperature are more marked, and the character of the dry season is more pronounced.

The plateau of San José has also a decidedly marked dry season, and receives a lesser quantity of rain than the other regions, amounting to from 50 to 60 inches yearly. The number of rainy days is from 160 to 180; the temperature is, in general, lower than in the other regions, its medium being only 69° F., its maximum 86° F., and its minimum 53° F.; though the wind has generally a northeastern direction, there is a sea-wind from the Pacific prevailing with the commencement of the rainy season. During the dry season there was noticed a humidity of only 50 per cent., but it increases rapidly to 80 and 90 per cent. with the spring; this change brings forth then numerous cases of disease.

The country is only thinly populated; the people are principally employed in breeding cattle and in farming. Their needs are limited to the first necessaries of life; near the coast they live in frame houses or in huts with walls of bamboo, and a roof sometimes of palm leaves, sometimes of tiles; the two-story frame houses are the best buildings with reference to health, as only their second story is inhabited, where the occupants are the least affected by influences of the ground. Not much better than the bamboo huts are the houses built on the plateau. They have clay walls and a roof of tiles; their floors consist, in most cases, of clay, but they are also made of brick and, of late, of wood; as all the buildings on the plateau have, on account of the earthquakes, only one story, the state of health of their occupants must of course be largely affected by the condition of the ground upon which they are erected. In connection herewith we dare not omit to make mention of the manner in which the privies are arranged. They are in reality mere cesspools, over which a sitting-board is placed. When they are filled they are covered, and another hole is dug in their neighborhood; the surrounding ground becomes, in this manner, after a time, infiltrated and infected, whereby great injury to health is caused. This is so much the more the case as wells are often situated in proximity to the privies, and receive from this source a variety of soluble substances besides those always found in considerable quantities in the ground of the country. Not much better is the water in the rivulets, which becomes contaminated by all kinds of waste material.

The principal nourishment of the people is prepared from beans, Indian corn and bananas; great quantities of meat are also consumed. Of stimulants, now-a-days, coffee has taken the place of coco, which formerly was much used, and great quantities of spirits are consumed; tobacco is used by adults and children.

The people are clad in woolen and cotton stuffs, but a large number of them—the peasants—seldom wear stockings or shoes. The wealthier persons are dressed after the French fashion.

Costa Rica has about 120,000 inhabitants. There were registered in one year 48 p. mille births and only 21 p. mille deaths among this population. Of 2,689 persons deceased in 1867, there died of fever 785, of dysentery 518, of hydrops 93, of pulmonary consumption 16, of convulsions of childhood 146, of pertussis 406, of other lung diseases 38, and of various diseases 687. These figures show that, compared with more northern climates, we meet diseases of the lungs seldom in Costa Rica, while on the other hand diseases affecting the alimentary canal are prevalent.

RELATION OF MAN TO TROPICAL CLIMATE.

In what manner the tropical climate alters the physiological condition of man, and how far diseases are influenced thereby, the author explains in certain points differently from others.

It is well known that, other things being equal, perspiration increases under a higher pressure. Now, constant perspiration is a sign of good health in tropical regions. The skin gets richer in blood on account of its greater activity, in return for which other parts become poorer of it and their watery excretions decrease in quantity. This is very remarkable for the excretion of the kidneys in tropical regions; likewise the secretions of the intestines become less watery; the fæces are dry and costiveness is often met with. It is provoking, therefore, to find it stated in some reports on tropical diseases that the secretion of bile is increased during the first stay in southern climates. As the internal organs contain less blood in such a case, the pressure in the portal vein must be diminished, and consequently there is *less* bile secreted. Moreover, if little nourishment is taken, especially less albuminous substances, the quantity of bile decreases likewise. Now, people take less food when under the influence of a higher temperature, provided other things be equal. There is also a certain proportion between the excretion of carbon by respiration and by the secretion of bile, *i. e.*, the more carbon is exhaled the more bile is secreted. As in tropical regions the production of carbonic acid is diminished, the same happens to the secretion of bile. Bile favors the absorption of fat, but men living within the tropics cannot digest so much fat as those living in more polar regions, consequently they secrete less bile than these.

It is true that a greater quantity of bile is secreted if much water is drank, no matter under what climate. Though there is much water taken by people within the tropics, they drink only little at once, and in this manner their secretion of bile is not influenced. Much water taken at once and repeatedly, causes only the secretion of a very watery bile. All these facts prove that the activity of the liver is decreased and not increased under the influence of higher temperature. The same is true of the pancreas.

The activity of the skin becomes less lively in tropical regions with persons who change their residences and move to places situated at a greater altitude, where the temperature is lower and at the same time the pressure of the atmosphere is decreased. The quantity of the excreted urine increases under the same influences, likewise the excretions of the intestinal walls. Therefore people are easily attacked by diarrhea. Woman lose more blood with the catamenial flow on the plateau than near the coast. The respiration is more easy on the plateau than in the coast districts, even if the relative humidity is equal in both regions, as the diffusion of gases from the lung surface increases with the decrease of pressure of the atmosphere.

Special notice is taken in the author's treatise only of those diseases which are in a certain connection with the climate of Costa Rica, and which have a peculiar influence over its inhabitants. As the most important for this region, as well as for all tropical countries, the doctor points out

MALARIAL DISEASES.

They are spread over the whole country, and depend, as far as intensity is concerned, upon local causes. The malarial diseases may become as grave on the plateau as on the coast, though they do not occur there so often as here. The frequent appearance of malaria in certain years must be explained with the extension of public roads made at such periods, and with the culture of newly laid out coffee plantations.

A regular fever attack or a neuralgic affection is not always a sequel of an infection with malaria. Besides, regular tertian forms come rarely under the treatment of a physician. But those undeveloped forms, with fever attacks lasting for several days, are oftener met with, and yet their diagnosis is made with difficulty, *i. e.*, in the beginning. The physician should always examine the spleen in the first place when in malarial regions, even if there is no ground for the slightest suspicion that malarial infection may have occurred. Such an examination is often troublesome in climates where gastric affections are prevalent, as in Costa Rica. It is advisable under all circumstances to free the bowels from their contents by cold water clysters for the examination. In case the spleen is found in an enlarged state, it must be generally attributed to malaria in Costa Rica. The temperature must, of course, be measured often and at regular intervals, the more so as not seldom cases of malarial infection are met with which may easily be confounded with typhoid fever; for, in place of bronchitis, which accompanies malarial fever in colder climates often, but more rarely in these tropical regions, it is complicated with catarrhal or diphtheritic affections of the intestines. Malarial neuralgia, especially of the trifacial, is comparatively often met with. In short, malarial disease has in Costa Rica, as well as otherwhere, a protean appearance. While it is true that an attack of malarial fever may be called forth by any kind of malaise, it may also be provoked by powerful therapeutical interferences, and this indeed often takes place. Persons who have been unwell for a few days, prostrated, had head-ache, suffered from costiveness, become suddenly attacked with fever, after having taken a strong purgative. A mild clyster would have done much better in such a case for the patient.

It is of importance to avoid every fever attack in order to cure malarial fever, as every attack provokes another one. The best remedy in acute as well as in chronic cases is quinine. Much depends upon the time at which and upon the dose in which it is given; besides all symptoms of other disease must be traced, and should it be found that a certain malaise provoked the fever attack, it must be taken under treatment. To infants under one year there should be given from i gr. to iss. gr. pro doso, several times a day, according to circumstances. Children of two years should take iss. to iii gr., and those of three years and more should take from iii gr. to v gr.; but no more than viii gr. should be given to children of ten years, for adults seldom need larger doses. As quinine does not act with certainty if given in pills or powders, even when twice the dose is given, it is best ordered to be taken with water in which a few drops of acid sulph. dil., or acid citric. is dissolved. In case the patient's stomach cannot bear this kind of medication, it is advisable to cause an enema of twice the dose, made up with starch, to be thrown into the large intestines, after cleansing this first by a clyster of tepid water. With these methods the author overcame all difficulties, so that he never was compelled to make use of the most powerfully acting application of quinine—the subcutaneous injection. This method is only commended when life should come in immediate danger.

In case the fever has a quotidian or tertian type, the quinine is best given two or four hours before an attack, and should it fail to prevent the paroxysm, a second dose must be given twelve hours later, a third dose twenty-four hours later, a fourth dose forty-eight hours later, etc. Though two doses often suffice, it is best to give four or five doses. Should the attacks still continue, two doses daily may be given for four or five days, but it would be useless to continue any longer with the treatment, should the attacks then not be completely suppressed. If the patient has only an enlarged spleen, headache, no appetite, and his regular perspiration becomes interrupted, he should take one dose of quinine at once, one after twelve and another after twenty-four hours. The same method must be pursued in case of malarial neuralgia. But besides quinine the patient must take indispensably large quantities of lemonade, to promote the secretion of urine and perspiration. In order not to disturb the latter, the patient must lie in bed. All nourishment which he takes for several days must have a liquid form. If a fever attack is provoked by a malaise which cannot be removed (menstruation), a dose of quinine is given every day till the cause ceases to act. When a patient has been treated for several weeks and has not recovered during such period, it is necessary to send him to a more healthy region, which may be done easily in Costa Rica. When arrived there, he must, of course, continue to be a subject for treatment.

Of late it has been advised to use quinine as a prophylactic in malarial regions. When a person wants to stay only for some days or weeks in such places, it is prudent to take a full dose of quinine every day or every second day, and to drink regularly lemonade; whereas, a person living in such a place constantly, should take quinine only when necessary.

DYSENTERY

is often, but not always, caused by a local state of the ground. The appearance of dysentery in Costa Rica is connected with the changes of seasons. The number of patients grows with the rainy season. Increased humidity of the atmosphere and no other cause, especially no change in the style of living, which is the same all the year, accounts for the prevalence of the disease. Perspiration is then more or less suppressed, and kidneys and intestines act vicariously for the skin. When the skin becomes in such cases more stimulated, either by increased temperature or by change of climate, a vicarious diarrhea may be cured. Such patients are apt to be attacked with dysentery when coming under the influence of a ground which is impregnated with decaying matter, using spoilt drinking water, or bearing retained fæcal masses in their bowels, which become decomposed and absorbed. An acute attack of dysentery may also come on within a few hours, when the skin is suddenly cooled. In case its activity is energetically restored, when large doses of ipecac cause a free perspiration, and if there is not acting some other cause, the patient may recover in a few days.

Fruits are often accused of causing dysentery, but only those containing much cellulose (pine apple), which irritates the intestines, may, on this account, sometimes contribute to its development. All fruits which cause constipation may favor dysentery. Healthy persons attacked by dysentery will get over it in a week or less, and have hardly any attack of fever, but children and weak persons are invaded by fever analogous to catarrhal fever. In many cases the disease commences with catarrhous stools, which become rapidly diphtheritic. Should the lower part of the large intestines be attacked in the beginning, tenesmus is often observed at once. In the further course of the disease there may again appear fever without any complication with other diseases, and the temperature may raise to even 104° F. Typhous symptoms accompany the fever, and the patient's life ceases by exhaustion. At other times the fever attack is only short, the patient becomes collapsed, apathetic, somnolent; he has stools without being conscious, and death comes on as in the second feverless state of yellow fever. The patient's condition becomes also dangerous when the infective fever coincides with the invasive fever. In this case the numerous bleeding parts of the intestines absorb the putrid substances; for, we can not overlook the fact that the coagulated blood, as well as the catarrhal and diphtheric matter, is often retained for a long period in the intestines, especially should the s. romanum or the coecum be paralyzed, which very often takes place.

Complications with other diseases will often alter the type of dysentery. This is not seldom combined with diseases of the stomach and with malarial fever. The diagnosis is confirmed in such cases by the peculiar stools. Profuse hemorrhage, or fresh blood besides that which is in a state of putrefaction, or many pus corpuscles in the stools will make prognosis worse. Tenesmus is a very unpleasant symptom to the patient, the more so when the number of evacuations is between 60 and 200 within twenty-four hours. In severe cases there takes place paralysis of the sphincters. Sometimes the valve of the cœcum is closed by cramps, and there is then no trace of bile to discover, and for twenty-four or forty-eight hours the stools contain only excretions of the colon, till at once they get normally colored. Should dullness on percussion be caused by abnormal contents of the intestine, a copious clyster of tepid water must be given.

Clysters generally play a prominent part in the treatment of dysentery. They should at least be applied three times a day to free the bowels from all noxious matter. Besides, albumen dissolved in water, meat extract, water gruel, barley gruel and, after some days, milk should be given. Of medicines there may be ordered morphine and diluted muriatic acid, especially when there is abdominal pain. Against the tenesmus atrop. sulph. was found to be of service. Patients who do not recover under this treatment must change the climate before there is any hope that their illness will be ended. But this requisite may easily be complied with in Costa Rica, where, in any of the settlements, different climates may be found in a not distant neighborhood.

DISEASES OF THE ALIMENTARY SYSTEM.

On several occasions it has been already hinted that malarial fever may be provoked or is complicated by diseases of the alimentary canal, or that dysentery may be connected with gastric disease or with affections of the smaller intestine and the liver. Gastric catarrh or diarrhea is caused, aside from those influences relating to the climate, by the food in many instances. It is an old prejudice to think that vegetables constitute a better nourishment within the tropics for men than meat does. This is not true, as many nations in those regions live more or less upon meat. The inhabitants of the South American republics, who consume meat as their principal food, enjoy exellent health.

The best food within the tropics is the banana, which contains albumen and the hydrates of carbon in the right proportion, 1:4. Next to this comes the crude juice of sugar, in which is much sugar and large quantities of albumen. It cannot well be recommended as a constant food on account of readily undergoing fermentation, whereby the stomach becomes disordered. Chronic gastric catarrh is also caused and maintained by substances containing starch. As such, we have to designate all kinds of bread, wherefore no complete cure of that disease can be performed if bread is eaten so long as it continues. Raw meat is well borne under such circumstances in higher latitudes as well as within the tropics. Accordingly, meat, if taken with the necessary quantity of hydrates of carbon, will be a suitable nutriment for the people in tropical regions. The beans are prepared with too much fat to constitute a healthy food. The same must be remarked of the bananas, when roasted in fat or when eaten in an unripe state. The so-called dulce, an inspissated juice of suger, which is much used, also causes gastric affections, from reasons already explained. Cucumbers and melons must be noted for the same reason.

Though spirits are not so much used as under higher latitudes, the consequences of their misuse develop more rapidly there. Probably nearly all cases of death from cirrhosis of the liver are caused by intemperance. Liver diseases seem to occur rarely, notwithstanding their diagnosis is made readily if a person only has lost appetite, if he has a bitter taste in his mouth, if he has headache, and if abdominal swelling is present. The peculiar yellow tint in malarial diseases is likewise ascribed to disease of the liver, and when the patient at last vomits some bile, the diagnosis of too much production of bile is invincible. The treatment of the diseases mentioned here is the same as in other climates.

VARIOUS DISEASES.

Lung diseases are comparatively rare, especially phthisis, from which there seems to be complete immunity. Foreigners attacked with this disease recover often in Central America. The plateaus of Costa Rica, St. Salvador and Guatemala have the best climate for such patients.

Diseases of the heart and vessels do not so often occur as is generally believed. The most cases of death from hydrops were occasioned by malarial diseases, dysentery and cirrhosis of the liver, not by heart diseases.

Among diseases of the nervous system delirium tremens is often seen, and is a more dangerous affection than in colder climates.

Diseases of the kidneys are very rare in Costa Rica as well as within the tropics in general. Therefore patients attacked by such should be sent to tropical regions, with a dry atmosphere.

Yellow fever was not observed in Costa Rica. Two epidemics which are recorded proved to be only epidemics of remittent fever. A few deaths caused by yellow fever were observed by the doctor in the border States. All other contagious diseases may come under notice occasionally, and if they cause epidemics, the bills of mortality get large.

Bronchocele is often to be noticed, especially in the narrow valleys of the highlands.

To the cases of eye diseases which came to the doctor's knowledge, myopia contributed a remarkably small number, which may be explained by the fact that the majority of the people can neither read nor write. Iritis and glaucoma are often met with. As no well educated obstetricians practice in the country, the physician often observes diseases peculiar to women, acquired in childbed.

Here we conclude our summary, from which the reader will have seen that diseases in the tropics are the same as in other parts of the world, and that the only difference between these regions, as far as diseases are concerned, consists in the proportion in which they appear. It seems as if in Central America the diseases which prevail are not beyond the reach of professional skill.

LEPTOTHRIX GROWTHS IN THE BLADDER.

Translated from Berliner Klinische Wochenschrift, by Robert Zimdars, M. D.

Dr. R. B. Kuessner writes: Leptothrix, a form of low vegetable organisms, has until now, as far as I know, never been found in the human bladder, and therefore it will be of interest to record a case which came before the medical clinic in Koenigsberg, Prussia, in which a discovery of this kind was made.

Our patient was a man, forty-eight years of age, suffering for years of diabetes. At the day of clinical demonstration his bladder was found nearly filled, and therefore he was catheterized. The urine flowed first entirely clear, and then suddenly opaque.

This opacity was due to abundant curd-like flocks of a faint brown color, some of which had the size of a hemp seed, but the most of them were smaller. After a few moments these flocks settled on the bottom of the glass and formed a peculiar sediment of a gray-brown color.

I remark here, that the patient had never been catheterized before, and the catheter, as well as the glass used for the collection of urine, were perfectly clean.

The further investigation of said flocks showed a moderately firm consistency—a pressure upon the cover glass was necessary to effect the thin spreading for microscopical examination. They appeared now almost exclusively as dense rows of leptothrix threads, which enveloped great numbers of epithelium cells.

Dr. Caspary, professor of botany, had the kindness to assist me in the investigation of these formations, and he confirmed my opinion. We saw mostly long, thin threads (about 0.005 mm. broad), partly straight, partly somewhat curved, which showed no ramifications where single and free. They received an intense yellow color by iodine, and a dark brown one by iodine and sulphuric acid. Other morphological elements similar or allied to the above mentioned (bacteria or yeast) were not demonstrable in the fresh urine, but showed themselves after twenty-four hours standing or later. The chemical properties of the urine (amount of sugar, etc.) were the same as on the foregoing days.

About forty-eight hours after his clinical presentation this patient died from a deep, penetrating, phlegmonous inflammation of the right leg. Until his death he voided only a small quantity of urine voluntarily; soon he became unconscious and passed his urine in the bed.

Post mortem examination, made twenty-four hours after death, also showed great numbers of flocks, with the same properties as those obtained *a vivo*; they only differed in consistency—they broke more easily by pressure, a property which also manifested itself with those first investigated after longer standing. The microscopic examination revealed the same.

This case offers a strong temptation to indulge in various reflections, and to make comparisons with similar observations, such as those made e. g. by Prof. Traube, of Berlin, in regard to the entrance of low organisms into the bladder. I refrain, however, expressly because it might be very difficult to give the exact proof, but I emphasize otherwise especially the fact that in the foregoing case *an abundant growth of low vegetable organisms* (*leptothrix*) *had taken place in the bladder of a living man, without causing any notable disturbance.*

QUINIA IN HYPODERMIC INJECTIONS AGAINST SUNSTROKE.

An English military surgeon in India, Dr. R. A. Hall, communicates from his experience and that of others that the hypodermic injection of quinia (five gr. doses) several times at short intervals, had an admirable effect against sunstroke. If the patient is able to swallow, 15 to 30 grains in one dose may be given at the same time, per os. This use of quinia in sunstroke is, as he states, generally adopted by the military surgeons in India.

Dr. Hall thinks this prompt effect is due to a powerful impression upon the nervous system, or to a stopping of the blood degeneration; perhaps both factors act together. The acid solution of sulphate of quinia is generally used. The Austrian military pharmacopœia has adopted the preparation *chininum amorphum muriaticum,* because it is thought to be undoubtedly the best agent for hypodermic injections.

Reports of Societies.

AMERICAN MEDICAL ASSOCIATION—TWENTY-SEVENTH ANNUAL MEETING.

The meeting opened at Horticultural Hall, Philadelphia, at 11 A. M., June 6th. The president-elect, Dr. J. M. Sims, was introduced by Dr. W. K. Bowling. The vice-presidents, secretaries, reporters and invited guests occupied the platform.

Prayer was offered by Rev. Dr. E. R. Beadle, of Philadelphia.

Dr. Wm. Pepper, as chairman of the committee of arrangements, offered a graceful greeting to the association, and extended invitations from various societies, academies, colleges and hospitals. He called especial attention to the remarkably low rate of mortality which prevails in Philadelphia. This he attributed largely to an absence of overcrowding—a result due in a great measure to the happy influence of the building associations. He also called attention to things likely to be of special interest to medical men during their stay in Philadelphia. The following order of exercises and entertainments was then presented:

Tuesday, June 6th.—The association will convene at Horticultural Hall at 11 A. M., and adjourn at 1 P. M.

Afternoon. The various sections will meet at Horticultural Hall at 3 P. M.

Evening. The promenade concert and supper at Horticultural Hall from 8 to 12 P. M.

Wednesday, June 7th.—The association will convene at 9:30 A. M., and adjourn at 1 P. M.

Afternoon. The various sections will meet at 3 P. M.

Evening. Prof. Geo. F. Barker (University of Pennsylvania) will deliver a lecture on "The World of the Seen and the Unseen," at Horticultural Hall.

THURSDAY, JUNE 8TH.—The association will convene at 9:30 A. M., and adjourn at 1 P. M.

Afternoon. The various sections will meet at 3 P. M.

Evening. Receptions to the association will be given at 8 P. M. at the residences of the following gentlemen: D. Hayes Agnew, M. D.; J. Solis Cohen, M. D.; Louis A. Duhring, M. D.; H. Lenox Hodge, M. D.; John H. Packard, M. D.; William H. Pancoast, M. D.; William Pepper, M. D.; Ellwood Wilson, M. D.

FRIDAY. JUNE 9TH.—The association will convene at 9:30 A. M.

Dr. Pepper moved that the following distinguished gentlemen be asked to take seats on the platform: Surgeon-General William Roth, 12th Corps (Royal Saxon) German Army, and staff, viz.: Assistant Surgeon Hans Heymann, 12th Corps (Royal Saxon) German Army, Dr. Max Brille, Dresden, Germany. Members by invitation, Dr. Wywoodzoff, of St. Petersburg, of the Russian Commission, Le Doctor Gaffray, representative of the Paris press to the Exposition, Surgeon-General J. K. Barnes, U. S. Army.

The secretary then stated that, as the roll at the present time amounts to upwards of five hundred names, he moved that the calling of the roll be dispensed with. After some discussion this was agreed to.

The secretary then read a letter from Dr. William O. Baldwin, of Montgomery, Alabama, regretting his absence and wishing the meeting success, which was ordered to be entered on the minutes.

The president, Dr. Sims, of New York, then read his address. After congratulating the delegates on meeting here in this Centennial, year and joining in the Centennial celebrations, the speaker said that here they were standing on hallowed ground—hallowed because the birthplace of a nation. A century is a brief period in the history of nations, but in that time we have increased from 3,000,000 to more than 40,000,000 of people, and have made our mark in science and letters. This city, too, is particularly interesting to this association, for here it, twenty-nine years ago, was organized. Its first meeting was held in Baltimore, in 1848, when the beloved Chapman was elected president.

The speaker then went on tracing the progress of the society, alluding to the last meeting in this city, in 1872, when so much time was lost in the discussion of the woman question. But now, said he, if any woman entering the medical profession rises to such a position as to be sent as a State or county delegate, the association is bound to receive her, and so, too, with colored physicians.

The president then spoke in terms of eulogy of the late vice-president, Dr. J. B. Jackson, of Kentucky, who died shortly after his election in May last; after which he entered upon the discussion of the various forms of medical education in this country, and the code of ethics obtaining among physicians, and was of the opinion that this code was not up to the standard of professional honor, and at the same time that it hampered the profession at large, in many ways, which should be perfectly free. The present code of ethics is violated every day, not only by the rank and file, but by those high in authority. This is the first time that the validity, the constitutionality of the code has been questioned, but it is not desirable that a committee should be appointed to investigate it. Let the code stand as it is; honorable men do not need it to influence their actions; dishonorable men will not regard it or any other. Let it be the object of this society to educate its students up to that higher code, that unwritten law which is the universal standard of England.

The speaker then went off into the discussion of syphilis, and urged with emphasis and force the desirability, the necessity for legislation which shall meet and combat these terrible scourges in a scientific and sufficient manner. He paid a handsome tribute to Professor Gross, whose boldness and outspokenness on this subject were deserving of all honor. Some startling statistics regarding prostitution on the Pacific Coast were given, and the speaker concluded his remarks on this subject by declaring that never must the evil be fought by licensing prostitution, as obtains in Europe. We want a system which will prevent the importation of disease from abroad, as well as a system which will prevent its spread in our midst. The boards of health in cities, suggested the speaker, should be given the same powers to ferret out and treat diseases of this nature as they now have in dealing with cholera or small-pox.

On motion the address was referred to the committee of publication.

Dr. Pepper then announced that the Medical building on the Centennial grounds would be used as a place of rendezvous for physicians visiting the Centennial exhibition.

After a variety of miscellaneous business, the association adjourned.

The second day of the meeting opened at Horticultural Hall, at 9:30 A. M.

The names of the committee on nomination were now read, as follows:

Alabama, E. B. Sulze; Arkansas, George T. Hood; California, W. Baker; Connecticut, A. Woodward; Delaware, W. Marshall; District of Columbia, J. Elliott; Florida, G. W. Belton; Georgia, J. P. Logan; Indiana, L. Humphrey; Illinois, L. D. Washburne; Iowa, —— Watson; Kentucky, H. M. Skillman; Kansas, C. V. Mottram; Michigan, A. S. Heaton; Massachusetts, A. B. Ball; Minnesota, E. C. Cross; Maryland, F. F. Lattimer; Maine, A. B. Snow; Missouri, J. F. Hodgen; Mississippi, W. Crampton; New Hampshire, J. L. Sewett; New York, N. C. Husted; New Jersey, S. Lille; North Carolina, E. Grissom; Ohio, W. J. Scott; Pennsylvania, Traill Green; Rhode Island, L. C. Butler; South Carolina, James McIntosh; Tennessee, John H. Callender; Texas, E. Darnell; Vermont, W. D. Holton; Virginia, J. S. Welford; West Virginia, J. C. Hupps; Wisconsin, H. P. Strong; U. S. Army, J. R. Smith; U. S. Navy, A. L. Gibon.

The judicial council reported that they had decided that the delegates from the Arkansas State Medical Society were entitled to admission.

The annual address of the chairman of the section on State medicine and hygiene was now read by Professor R. C. Kedzie, of Lansing, Mich. His subject was "Natural Purifiers."

Among these, said he, air and water hold the first place, and there is but one purifier—oxygen. Of natural purifiers, water demands the most attention. Water can contain two classes of poisons: first, fixed poisons, such as arsenic and strychnine; the other class of poisons is germinal. Dilution does not proportionately diminish the danger from the latter class of poisons.

In conclusion, he offered the following resolutions, which were adopted:

Resolved, That it is the first duty of States and municipalities, first in importance and first in the order of time, to make a sanitary survey of the water supply, to preserve it against all unnecessary and avoidable contamination.

Resolved, That no municipality should introduce a water system without at the same time providing a corresponding and co-extensive sewer system.

Dr. A. Garcelon, of Maine, as chairman of the section on surgery, read the annual address on the subject. It was mainly historical.

Dr. Edward Seguin presented the following report on the establishment of uniform means of observation and of medical records for the physicians of all countries:

This action of the American Medical Association has been expressed by the adoption of successive resolutions, and by the sending of delegates charged with the mission of advocating this reform, as follows:

In 1873. To the British Medical Association meeting in London, and to the French Association for the Advancement of the Sciences, meeting at Lyons.

In 1874. To the British Medical Association meeting at Norwich, and to the French Association for the Advancement of the Sciences, meeting at Lille.

In 1875. To the International Medical Congress, meeting at Bruxelles.

In 1876 (next September) the same Congress will meet in this very place; and now the American Medical Association is called to decide what position it will assume in this matter. Will it recede from its former position, and leave the task to second-hand promoters, or will it continue its initiative before the International Council?

This is not only a question of pride for the association; it is, too, one of justice due to the American physicians at large. If the constitution and by-laws of this association prescribe an annual transfer of its meeting from one part to another of this vast country, it is to give us opportunities to study and express the wants of the whole profession. Of these wants, none has been found more deeply felt than the one of partaking, as givers and receivers, in the discoveries of our art. But this want is not ours alone; it is universal; and the American Medical Association will deserve the thanks of all for having planned and carried into execution the most important instrument of internationalization of the medical progress.

A resolution was adopted that the association charges its delegates to advocate as hitherto the uniformity of means of observation, and especially at the next International Congress to be held in Philadelphia in September.

Drs. Seguin and Bowditch were appointed delegates to the International Congress.

The report of the committee on publication was read. It states that 950 copies of the volume of transactions for 1875 were printed at an aggregate expense of $2,000; of these, 883 copies have been distributed to members, 28 to medical journals and societies.

The report of the treasurer shows a balance on hand, June 1, 1876, of $4,577.07.

The report of the librarian states that during the year there have been added to the library 124 distinct titles, exclusive of yearly volumes of transactions of societies, reports of hospitals and boards of health, and volumes of medical journals. This addition makes the library consist of 630 distinct titles, which comprehend 1,514 volumes, including pamphlets.

Dr. E. C. Harward, of New York, a delegate to the Brussels International Medical Congress, held last September, presented a report, which was referred to the committee on publication.

A sketch of the life of Dr. Armsby, of Albany, prepared by Prof. Hailes, was read.

The association then adjourned until 9.30 A. M., to-morrow.

The general meeting on the third day was held in the Alhambra Theater. This change in the hall was made because it was impossible to hear the various speakers in the former hall.

At 9.30, precisely, the meeting was called to order by the president.

On motion, the resolution of yesterday that all persons whose names are at present on the roll shall be considered members was reconsidered, and it was voted, after some discussion, that the roll of members, amounting to some 730 names, be called. In accordance with this resolution, the secretary, Dr. Atkinson, began reading the roll, and continued reading until ten o'clock, when the hour having arrived for the reading of the paper on obstetrics, by Dr. S. C. Busey, of Washington, D. C., the reading of the roll was discontinued, and the doctor was introduced by the president. The speaker illustrated his remarks by a series of diagrams, which were passed around among the delegates for inspection.

The effort was then again made to do away with the reading of the roll, but unsuccessfully. At this juncture the report of the judicial council, signed by Dr. Bennan, secretary, recommending that the delegates from Michigan State Society be received, was presented. The report was applauded, and the reading of the roll was continued.

At the name of Dr. Thomas J. Griffiths, of Louisville, an objection was made that he was not or had not been present, and the secretary was requested to strike his name from the roll, if the objection should be found, on inquiry, to be well founded.

On the reading of the name of Sarah Hackett Stevens, representing the Illinois State Society, Dr. Brodie, of Detroit, moved that that and all such names be referred to the judicial counsel. A motion that this resolution be laid upon the table was carried by a large vote, amid considerable applause.

Dr. Toner, of Washington, moved that the roll as read be confirmed, with the exception of the objections taken.

A resolution providing that it was not derogatory in any physician to take out a patent for a surgical intrument of any kind was referred to the judicial council.

Dr. Sims, on behalf of the trustees of the fund for a monument to the late Dr. McDowell, of Kentucky, reported a recommendation for an increase one dollar each year in membership dues, the amount thus raised to go to said fund.

Dr. Toner stated that the resolution so recommending would have to lay over one year under the rules. He hoped, however, that the rules would be waived for this purpose by unanimous consent.

Objection was raised, and a motion to lay the resolution on the table was agreed to.

Dr. Toner moved that $1,000 be appropriated out of the funds of the association for the McDowell fund.

Dr. Howard moved the point of order that it was a rule of the association that no new business should be transacted except on the first and fourth days of the session of the association, and hoped the rules would not be departed from. The chair decided the order well taken, and the motion of Dr. Toner was declared out of order.

Dr. Sims said he was as anxious as any one to secure the money asked for, but after conversation with gentlemen around him he was satisfied the subject could not be discussed to-day. The association would have to defer action until to-morrow.

Dr. Henry A. Martin, of Boston, offered a resolution that the subject of bovine or animal vaccination is an important one as compared with the usual arm to arm practice, and that a committee be appointed to report upon the subject at the next meeting of the association. Agreed to.

The meeting then adjourned.

The association assembled at 9.30 A. M., June 9th, as per adjournment.

Dr. Toner, of Washington, offered the following, which was unanimously adopted:

Resolved, That members of the medical profession, who in any way aid or abet the graduation of medical students in irregular or exclusive systems of medicine, are deemed thereby to violate the spirit of the ethics of the American Medical Association.*

Dr. Atkinson, the secretary, presented a report, which states that in obedience to the resolution adopted at the session of 1875, he reports that in reply to his inquiries he is informed that boards of health exist in Alabama, California, Georgia, Massachusetts, Michigan, Minnesota, Virginia and Wisconsin. He had written to the Governors of Delaware, Indiana, Iowa, Nebraska, New Jersey, New York, South Carolina, Texas and Vermont with almost negative results.

Dr. H. C. Wood, of Philadelphia, offered the following, which was adopted:

Resolved, That a committee of three be appointed by the chair to obtain from Congress an appropriation for the publication of the subject catalogue of the National Library, and that the State societies are requested to take such action as may be deemed fit to further said object.

The committee on nominations presented the following report, which was adopted:

President—Dr. Henry I. Bowditch, of Massachusetts.

Vice-Presidents—Dr. N. J. Pittman, of North Carolina; Dr. Franklin Staples, of Minnesota; Dr. Joseph R. Smith, of U. S. Army; Dr. Samuel C. Busey, of Washington, D. C.

Treasurer—Dr. Caspar Wister, of Pennsylvania.

Librarian—Dr. William Lee, of District of Columbia.

Committee on Library—Dr. Johnson Eliot, of District of Columbia.

Assistant Secretary—Dr. J. H. Hollister, of Illinois.

Committee of Arrangements—Drs. N. S. Davis, J. W. Freer, H. A. Johnson, T. D. Fitch, H. W. Jones, Joseph P. Ross, Leslie Curtis.

Committee of Publication—Dr. W. B. Atkinson, chairman; Dr. T. M. Drysdale, Albert Fricke, Samuel D. Gross, Caspar Wister, Richard J. Dunglison, all of Pennsylvania, and Dr. Williams, of District of Columbia.

Next place of meeting—Chicago, Ill.

Time of meeting—First Tuesday in June, 1877.

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* A motion to ask the Judicial Council to define the meaning of the terms "aid and abet" was carried.

Judicial Counsel—Drs. N. S. Davis, of Illinois, E. L. Howard, of Maryland, W. O. Baldwin, of Alabama, H. W. Dean, of New York, A. N. Talley, of South Carolina, J. P. Logan, of Georgia, and D. W. Stormont, of Kansas, in place of the seven whose terms expire at this meeting. The rest of the present council continue.

Committee on Prize Essays—Dr. N. S. Davis, Illinois, chairman; Edmund Andrews, E. Ingalls, Moses Gunn, E. P. Cook, all of Illinois.

Special Committee on Influence of Climate in Pulmonary Diseases in Florida—Dr. E. T. Saball, continued.

Delegates to the International Medical Congress, to be held September 4th, 1876, at Philadelphia: Drs. H. J. Bowditch, Massachusetts, E. Seguin, New York, Thomas L. Maddon, Iowa, J. S. Welford, of Virginia, A. Dunlap, of Ohio, John T. Hodgen, Missouri, Joseph Carson, Pennsylvania, John C. Dalton, New York, W. O. Baldwin, Alabama, D. W. Yandell, Kentucky, N. S. Davis, Illinois, Austin Flint, Sr., New York, T. G. Richardson, Louisiana, W. F. Westmoreland, Georgia, A. M. Pollock, Pennsylvania, Frank Hastings Hamilton, New York, G. M. Bemiss, Louisiana, L. A. Dugas, Georgia, Francis Bacon, Connecticut, Hunter McGuire, Virginia, A. G. Shortleff, California, E. M. Moore, New York, O. W. Holmes, Massachusetts, G. A. Otis, U. S. Army, F. E. Gunnell, U. S. Navy, E. C. Harwood, of New York.

On motion of Dr. J. L. Atlee, of Lancaster, the salary of Dr. W. B. Atkinson, the permanent secretary, was made $1,000 for the past year.

Dr. Bell, of Iowa, offered the following, which was adopted:

Resolved, That there be appointed a committee of three persons, members of this association, in each of those States were there has been no action taken for the establishment of Boards of Health, to urge upon those States the necessity of the establishment of such boards.

A communication was read from the Centennial Commissioners from Victoria, asking information as to the list of medical colleges in good standing in this country. A motion was made to refer it to the judicial council.

After some discussion, on motion of Dr. Toner, the whole matter was laid on the table.

The newly elected president, Dr. H. J. Bowditch, of Massachusetts, was then conducted to the chair, and Dr. Sims, the retiring president, delivered his farewell address. He said the work transacted during the past three days would exhibit to science a record of progress greater than ever before. At this meeting many familiar faces have been missed. Francis G. Smith, who has served them long and faithfully, is abroad to recuperate his shattered health. The absence of so many of our Southern brethren is not due to any lack of interest in the proceedings. Thank God, the day of strife is passed, and passed forever. There was bitterness and hate, now there is kindness and affection. What higher proof can there be of this than the election of a man educated at the South? At this time Massachusetts and South Carolina can join hands.

Dr. Bowditch then addressed the association, and said the place had sought him and not he the place. He deemed it a special honor to occupy the position in this Centennial year. In conclusion he returned his sincere thanks.

Dr. E. R. Squibb, of Brooklyn, N. Y., by invitation offered the following, which was adopted:

Whereas, The usual time for a decennial revision of the United States Pharmacopœia is drawing near, and

Whereas, The plan of revision and publication in force since 1820 may not now be the best that could be devised; therefore be it

Resolved, That the American Medical Association take the whole subject of the National Pharmacopœia into consideration for a revision of its management, and for the present time, with especial reference to the following questions:

First—Whether the present plan of decennial revision and publication be practically sufficient for the needs of the materia medica and pharmacy of the present time, and, if not sufficient, whether a plan could be devised which might offer probable advantages enough to justify an attempt to disturb the present one.

Second—Whether this association be the proper custodian in this country of the interests involved in the National Pharmacopœia; and if it is the proper source of the National codex, whom can it invite to co-operate with it in the work?

Third—If it be a work for this association, in what way can its details be wisely undertaken with any prospect of material improvement upon the present plan?

Resolved, That in order to facilitate mature and general deliberation upon so important a subject, the final discussion of these resolutions be laid over at least one year, and that the matter be recommended to the president of the association for consideration in his annual address for the meeting of 1877.

He fully explained the meaning of his resolution, and we hope the matter may obtain the careful study of all intelligent physicians.

On motion, the thanks of the association were returned to the proprietors of the Alhambra Theater for the loan of their beautiful building on Thursday.

The association then adjourned *sine die.*

From the account already given, it will be seen that the right of delegates from the Michigan State Medical Society to be registered as members of the American Medical Association was questioned, and that the judicial council decided in favor of the society. In so far as we could learn, the facts respecting this attack upon the Michigan State Society are as follows:

(1.) Drs. Frothingham and McLean, on arriving at the registration office, were refused registration. The ground of refusal was a copy of the proceedings of the Michigan State Medical Society, forwarded to Dr. Atkinson by Dr. Ranney, Secretary of the Michigan State Medical Society.

(2.) The first-named persons immediately objected to the registration of any delegates from the Michigan State Medical Society. Ground of objection—that said State society had violated the code of ethics in its advocacy of a State examining board, some two years since.

(3.) These facts coming to the notice of members of the State Medical Society, Dr. Foster Pratt preferred specific charges against Dr. A. B. Palmer, Dr. D. McLean and Dr. Geo. Frothingham. Ground of these charges—their efforts to aid and abet the education and graduation of irregular practitioners.

(4.) These charges went before the judicial council. In the case of the charges against the State Medical Society, Drs. Frothingham and Palmer only were heard, when the council decided that the delegates from said society should be admitted.

(5.) As to the charges against Drs. Frothingham, etc., there was no public official decision given by the council.

(6.) Dr. Frothingham preferred charges against Dr. G. K. Johnson, of Grand Rapids, and Dr. Foster Pratt, of Kalamazoo. The ground of these charges we could not positively ascertain, but in so far as we could learn, they were based on their action as committee of the State society. Both sides were heard to some extent, and a large amount of documentary evidence presented to the judicial council. The case was laid over till next year.

The real meaning of the charges was simply to obtain from the judicial council a decision respecting (1) " the action of the Michigan State Medical Society," (2) the action of the Faculty at the Medical Department of Michigan University, in aiding and abetting the education of avowed homeopaths. The questions involved were of such vast moment that the council thought it wise to take plenty of time for their consideration. Hence they committed them to a sub-committee consisting of Dr. N. S. Davis, of Illinois, Dr. A. N. Talley, of South Carolina, and E. Loyd Howard, of Maryland. This committee will, it is hoped, make such a report as to settle the question to the satisfaction of all who love the medical profession.

(7.) Meantime the association as a whole unanimously passed a resolution, which, in effect, says that to aid or abet in graduating students in exclusive systems of medicines is to violate the spirit of the code of ethics of the American Medical Associations.

By rumor (no official list was published or read) we learned that about 750 delegates were registered. For the first time since its organization Dr. N. S. Davis, of Chicago, was absent from the meeting of the association, being detained at home by domestic affliction. His absence was the source of very general regret. Had he been present his clear head would have obviated much confusion, that seriously marred the meeting. All are aware that the scientific work of the association is mainly performed at the section meetings each afternoon. Reports from the various sections indicate that considerable good work was accomplished.

On the first day the section on obstetrics discussed the treatment of the pedicle in ovariotomy. In the section on the practice of medicine, Dr. Frank Davis, of Chicago, Illinois, read a paper on the use of extract of malt. It was discussed by Drs. Squibb, Toner, Angies and others. In the section on surgery, Dr. Sayre read a paper on the treatment of Potts' disease by plaster dressing, which caused an interesting discussion. On the second day the section on obstetrics considered a new galvano-caustic battery of wonderful power and unusually convenient size, devised by Dr. Byrne, of Brooklyn, N. Y.

In the section on practice of medicine, etc., Dr. Bulkley read a paper on the "Use of Arsenic in Skin Diseases." In the section on surgery, Dr. Hewson read a paper on Pirigoff's amputation. There was a hot discussion on the treatment of fractures. In the section on State hygiene, etc., a bill was read, proposing the establishment of a national State board of health. It was drawn up by Dr. Baker, of Lansing, Mich., to be sent to Congress. Dr. May read a paper on "Social Aspects of the Alcohol Question." Dr. Staples read a paper on "Climatology in Minnesota, in Relation to Pulmonary Diseases." By unanimous vote a resolution was passed proposing the erection of State lunatic asylums. In the section on medical jurisprudence, Dr. Woodward read an interesting paper on "Differential Diagnosis of Blood Corpuscles."

On the third day, section on obstetrics discussed "Puerperal Hemorrhage." Section on practice of medicine, a paper on cholera. Section on State medicine, a paper on "The Water Supply of Arkansas," and one on the "Experiences of a Sanitarian," by Dr. B. Lee, of Philadelphia. Section on surgery witnessed the application, by Dr. Sayre, of the plaster dressing for Pott's disease, and discussed the surgical treatment of uterine fibroids.

The feeling was very common that the success of the meeting was greatly diminished by the lack of proper arrangements. Prominent among these may be mentioned, (1) the lack of a suitable hall and suitable rooms for the sections; (2) the lack of any register by which one physician could ascertain who was attending the convention; (3) the lack of the public advertisement of the places and exact time for the general meetings and that of the sections.

We are well aware that the particular individuals constituting the committee of arrangements must have been over-worked. But we are confident that in Philadelphia there could have been found men who were not over-worked, and who would have gladly worked for the interests of the association.

One other suggestion: It seems to us that the association would do well to exclude all newspaper reporters, and hire for itself two competent short-hand reporters. Let these reporters take a complete report of the general meetings, and said reports be published under the direction of a committee, and promptly distributed to each member. In this way all could keep perfectly posted, and the association avoid the wholesale publication of imperfect and erroneous accounts in the secular press.

PROCEEDINGS OF THE ASSOCIATION OF THE REPRESENTATIVES OF AMERICAN MEDICAL COLLEGES, HELD AT PHILADELPHIA JUNE 2d and 3d, 1876.

A convention of representatives of numerous medical colleges of the United States was held in the hall of the Jefferson Medical College, of Philadelphia, June 2d and 3d, 1876, in pursuance of the following call:

LOUISVILLE, Ky., May 15, 1876.

Following a general correspondence with the various medical colleges of the United States, the undersigned issue this call for a convention, to be held in Philadelphia, on Friday, June 2, 1876, four days in advance of the meeting of the American Medical Association. The object of the convention is to consider all matters relating to reform in medical college work.

That decided results may be reached, the faculty of each college is requested to send one or more delegates, clothed with *plenary* powers to determine final action on every question.

Should any college find it impracticable to send a representative, it is hoped that it will set forth fully by letter to the convention the views it may hold touching the suppression of existing evils and methods of practical improvement.

Officers of the following colleges have informally signified their hearty approval of the movement:

Jefferson Medical College, College of Physicians and Surgeons, N. Y., Bellevue Hospital Medical College, Ohio Medical College, Miami Medical College, Rush Medical College, Detroit Medical College, Louisville Hospital Medical College, Medical Department of University of Louisville, St. Louis Medical College, Keokuk Medical College, Cleveland Medical College, Starling Medical College, Medical Department of Georgetown College, Medical Department of Columbian University, Long Island College Hospital, Medical Department of Syracuse University, Evansville Medical College, Indiana Medical College, Medical Department of University of Nashville, Atlanta Medical College, Mobile Medical College, Savannah Medical College, Augusta Medical College.

The convention will be called to order in the hall of the Jefferson Medical College at 11 o'clock A. M. on the day above named.

J. B. BIDDLE, M. D., Jefferson Medical College.
WM. H. MUSSEY, M. D., Miami Medical College.
JOHN T. HODGEN, M. D., St. Louis Medical College.
J. ADAMS ALLEN, M. D., Rush Medical College.
W. T. BRIGGS, M. D., Med. Dep't University of Nashville.
J. M. BODINE, M. D., Med. Dep't University of Louisville.

At the hour named the following representatives assembled:

Jefferson Medical College—Prof. J. B. Biddle and Prof. S. D. Gross.

Medical Department University of Pennsylvania—Prof. R. E. Rogers.

College Physicians and Surgeons of New York—Prof. Edward Curtis.

Medical Department University of Louisville—Prof. L. P. Yandell, Jr., and Prof. J. M. Bodine.

Hospital College of Medicine of Louisville—Prof. J. A. Larabee and Prof. T. C. Wilson.

Long Island Hospital Medical College—Prof. J. H. Raymond.

Medical Department University of Iowa—Prof. E. Clapp.

College of Physicians and Surgeons Syracuse University—Prof. H. B. Wilbur and Prof. Van Dyne.

Chicago Medical College—Prof. L. Curtis.

Medical Department University of Georgia—Prof. E. Geddings.

Indiana Medical College—Prof. T. B. Harvey and Prof. L. D. Waterman.

Medical Department University of Wooster—Prof. W. J. Scott.

Cleveland Medical College—Prof. J. H. Bennett and Prof. Heims.

Detroit Medical College—Prof. E. W. Jenks and Prof. L. Connor.

Starling Medical College—Prof. S. Loving.

Medical Department University of Vermont—Prof. H. D. Holton.

St. Louis Medical College—Prof. J. L. B. Alleyne.

Atlanta Medical College—Prof. W. F. Westmoreland.

Medical Department University of Nashville—Prof. W. T. Briggs.

Medical Department Vanderbilt University—Prof. T. A. Atchison.

Missouri Medical College—Prof. A. P. Lankford.

Keokuk College Physicians and Surgeons—Prof. J. J. M. Angier.

Columbus Medical College—Prof. J. F. Baldwin.

On motion of Prof. Yandell, Prof. J. B. Biddle was elected President of the convention, and on motion of Prof. Bennett, Prof. Leartus Connor was elected Secretary.

On motion of Prof. E. Curtis, it was

Resolved, That the action of the convention shall not be considered binding upon the colleges represented unless endorsed by their respective faculties.

On motion of Prof. Gross, it was

Resolved, That a committee be appointed to submit business for the consideration of the convention, to report at the afternoon session.

The chair appointed as this committee, Profs. Bodine, Gross, Geddings, Holton and Scott.

The convention adjourned until 4 P. M.

Pursuant to adjournment, the convention reassembled at 4 P. M., the President in the chair.

The minutes of the last meeting were read and approved.

Prof. Bodine, from the committee to prepare business for the convention, reported the following questions for its consideration:

1. Shall the beneficiary system, with its present abuses, be condemned or endorsed?

After discussion, on motion of Prof. E. Curtis, the following preamble and resolutions were adopted with reference to question first:

Whereas, The practice of reducing or remitting in individual cases the established fees of a college has the objectionable feature of discriminating between students who may be equally deserving, and opening the door to possible gross abuses; therefore

Resolved, first, That this convention regards the above privilege as one to be deprecated in general, and, if put into practice at all, to be exercised both rarely and reluctantly, and only in unusual circumstances, and after unsolicited application by proven deserving candidates.

Resolved, second, That anything like a wholesale system of such reduction or remission of established fees, or any open solicitation of recipients of such favors be regarded as in the highest degree improper, and that any college indulging in such practices deserves to forfeit its place on the *ad eundem* list of medical colleges.

Question 2. Shall two consecutive courses of lectures in one year entitle students to become candidates for graduation?

On motion of Prof. E. Curtis, it was

Resolved, That it is the opinion of this convention that no two consecutive sets of lecture tickets shall be regarded as fulfilling the usual prerequisites of instruction for graduation, where the time between the beginning of the first course and the end of the second is less than fifteen months.

Question 3. Shall any faculty under any circumstances issue a diploma not bearing the graduate's name?

On motion of Prof. Waterman, it was

Resolved, That no medical faculty should issue a diploma not bearing the graduate's name.

It was ordered that the meetings of the convention shall be at 10 A. M. and 4 P. M. On motion, the convention adjourned.

The convention reassembled on Saturday, June 3d, at 10 A. M., the President in the chair.

The minutes of the previous meeting were read and approved.

On motion of Prof. L. P. Yandell, Jr., the regular order of business was suspended, and communications were read from the faculties of the following medical colleges: Louisville Medical College, Kentucky School of Medicine, Evansville Medical College, Rush Medical College, Medical Department University Louisiana, Medical School of Harvard University, Savannah Medical College, Cincinnati College of Medicine and Surgery, Medical College of State of South Carolina.

On motion of Prof. Atchison, these communications were placed on file.

Question 4. Shall this convention resolve itself into a permanent organization?

On motion of Prof. Atchison, it was

Resolved, That the question be referred to a committee of five, to report at the afternoon session.

The chair appointed as this committee Profs. Atchison, L. Curtis, E. Curtis, Yandell and Scott.

On motion of Prof. Rogers, the President and Secretary of the convention and Prof. Atchison were appointed a committee on publication.

Question 5. Is there any reason why the customary diploma fee shall be abolished?

On motion of Prof. Rogers, it was

Resolved, That it is the sense of the convention that the diploma fee should not be abolished.

Question 6. Is it advisable to adopt a graded course of study?

On motion of Prof. Bodine, the following preamble and resolution were adopted in reference to this question:

Whereas, A knowledge of the elementary branches of medicine should precede a study of the practical branches.

Resolved, That, in the hope of inducing students to prolong and systematize their studies, this convention recommends to all medical colleges to offer to students the option of three courses of lectures, after a plan similar to the following: Students who have attended two full courses of lectures on anatomy, chemistry, materia medica and physiology, may be examined upon any of these subjects at the end of their second course. During their third course such students may devote themselves to the lectures upon the theory and practice of medicine, surgery, obstetrics and diseases of women and children, upon which subjects only they shall be examined at the final examination for the degree of M. D.—their standing, however, to be determined by the results of both examinations.

On motion, adjourned till 4 P. M.

The convention re-assembled at four P. M., the President in the chair. The minutes of the last meeting were read and approved.

Prof. Atchison, from the committee to whom the subject of permanent organization was referred, reported the following resolutions:

Resolved, *1.* That this *convention* now proceed to form a Provisional Association of American Medical Colleges, under its present officers.

Resolved, *2.* That when the Association adjourns, it shall adjourn to meet at the call of its President.

Resolved, *3.* That the various medical colleges be invited to take into consideration the project of forming, at the next meeting of this Provisional Association, a permanent Association of American Medical Colleges.

Resolved, *4.* That for the furtherance of this object, a committee of three be appointed at this meeting to confer by letter with the various colleges, and invite their views on the proper object and plan of such proposed organization; and upon the receipt of the same, to draft a constitution and by-laws for a permanent Association, to be submitted at the next meeting of this Association.

Resolved, 5. That the advisory resolutions upon matters of college policy passed by this convention be printed and forwarded to all regular medical colleges in the United States for their consideration.

The chair appointed as committee to carry out the foregoing resolutions Prof. T. A. Atchison, Prof. Edward Curtis and Prof. L. P. Yandell, Jr.

These resolutions were adopted, and the convention resolved itself into the Provisional Association of American Medical Colleges.

Question 7. Is it proper for a regular college to have any kind of alliance with homeopathy?

On motion of Prof. Atchison, it was unanimously

Resolved, That in the opinion of this Association, medical colleges ought not to recognize or hold fellowship with any school or its alumni in which irregular medicine is taught as a part of the curriculum.

Question 8. Can college fees be made uniform?

On motion of Prof. Geddings, this question was referred to a committee of five, to report at the meeting of the Association to be held in 1877.

The chair appointed Profs. Geddings, Gross, Angier, E. Curtis and L. Curtis, this committee.

On motion of Prof. Biddle, the following resolution was unanimously adopted:

No degree in medicine should be conferred, under any circumstances, except after an examination in person of the candidate upon all the branches of medicine.

On motion of Prof. Atchison, the thanks of the Association were tendered to the President for the able and impartial manner in which he had discharged the duties of the chair.

On motion of Prof. Yandell, the thanks of the Association were tendered to the Secretary for his efficient services.

On motion of Prof. Larrabee, the thanks of the Association were tendered to Jefferson Medical College for the use of the hall and other courtesies.

On motion, the Association adjourned to meet at the call of the President.

J. B. BIDDLE, M. D., *President.*

LEARTUS CONNOR, M. D., *Secretary.*

IONIA COUNTY MEDICAL SOCIETY.

PURSUANT to a call for a meeting of the physicians of Ionia county, to be held at Dr. Romig's office, Ionia, May 30th, a good representation was present, and resulted in the organization of a society, called the Ionia County Medical Society. Dr. Gundrum was elected president, and Dr. Romig secretary. A committee was appointed by the chair, consisting of Drs. Barnes, Pray and Spaulding, to draft a constitution and by-laws. After some discussion, the society adopted the constitution and by-laws as reported by the committee.

On motion, the chair appointed a committee on credentials, consisting of Drs. Pray, Barnes and Lincoln, who reported favorably on all present.

The society then proceeded to the election of officers for the following year, which resulted as follows, viz.: President, Dr. Geo. Pray; Vice-President, Dr. F. Gundrum; Secretary, Dr. S. Romig; Treasurer, Dr. W. B. Thomas.

The president appointed Drs. Barnes, Spaulding and Gundrum to act as a board of censors for the following year.

After making appointment for the next meeting, etc., the society adjourned to meet at Dr. Gundrum's office, Ionia, July 25, 1876.

DR. S. V. ROMIG,
Secretary.

Correspondence.

LETTER FROM NEW YORK—FORMATION OF THE AMERICAN GYNÆCOLOGICAL ASSOCIATION.

THE organization of the association "for the promotion of knowledge in all that pertains to diseases of women and obstetrics" was effected in New York, June 3d, at a meeting held for the purpose in the building of the Academy of Medicine. There were present at the founding of this new society a number of leading gynæcologists from various parts of the Union, New York being largely represented. Dr. Peaslee, of New York, was called to the chair, and Dr. Chadwick, of Boston, acted as secretary. The chairman stated the object of the meeting, and called for remarks from some of the gentlemen, which was responded to by Drs. Sims, Barker, Paine, Byford, Taylor, Chadwick and others.

On motion, a committee was appointed to prepare a constitution and by-laws.

Pending the deliberation of the committee, letters were read from Drs. Penrose and Wallace, of Philadelphia; Dr. Buckingham, of Boston; Dr. White, of Buffalo; Dr. J. C. Reeve, of Dayton, O., and others, who were prevented from being present, but favored the formation of the association.

The committee's report upon constitution and by-laws was accepted, and each clause debated *seriatim;* after which it was virtually adopted.

A committee on nominations was appointed by the chair, consisting of Drs. Sinclair, of Boston; Jenks, of Detroit; Goodell, of Philadelphia; Lusk, of New York; Noeggerath, of New York, and Trask, of Astoria, N. Y., who reported the following officers: Dr. Fordyce Baker, of New York, President; Dr. W. H. Byford, of Chicago, and Dr. W. L. Atlee, of Philadelphia, Vice Presidents; Dr. J. R. Chadwick, of Boston, Secretary; Dr. P. Munde, of New York, treasurer; Drs. Sims, of New York, Parvin, of Indianapolis, Lyman, of Boston, and Goodell, of Philadelphia, councilors. The report was accepted and adopted.

The association consists of fellows and honorary fellows, limited in number by an organic law of the association. The next meeting will be held in New York, September 13th, being the week following the International Medical Congress at Philadelphia, at which time it is expected there will be present Drs. Barnes, Priestly, and a number of distinguished gynæcologists from abroad. It will thus be seen that this organization started out at a most favorable and auspicious time. As American gynæcologists are not surpassed by those of any part of the globe, it seems peculiarly appropriate that this new association should be inaugurated in this Centennial year, when celebrations are in order and glorifications excusable by the gynæcologists of a nation which has much to be proud of in the development of medicine. It is extremely fortunate that the meeting in September, which inaugurates the scientific work of the association, will be honored by the presence of some of the most distinguished gynæcologists of Europe.

The following is a full list of the founders of the new society, nearly all of whom were present at the meeting on organization:

T. G. Thomas, Fordyce Baker, J. M. Sims, E. R. Peaslee, T. A. Emmet, E. Noeggerath, W. J. Lusk, J. E. Taylor, Paul F. Munde, New York City; John Byrne, J. C. Skene, Brooklyn; James D. Trask, Astoria; J. P. White, Buffalo; E. Van de Warker, Syracuse; C. E. Buckingham, G. H. Bixby, W. L. Richardson, George F. Lyman, James R. Chadwick, D. Humphreys Storer and —— Sinclair, Boston; W. L. Atlee, William Goodell, A. H. Smith, R. A. F. Penrose, E. Wallace, T. M. Drysdale, J. V. Ingham, Philadelphia; Edward W. Jenks, Detroit; Wm. H. Byford, Chicago; T. Parvin, Indianapolis; G. J. Engelmann, St. Louis; J. C. Reeve, Dayton, O.; R. Battey, Rome, Ga.; H. F. Campbell, Augusta, Ga.; J. Taber Johnson, S. C. Busey, Washington; W. T. Howard, Wilson, Baltimore.

Yours, truly, W.

Condensations from our Exchanges.

PRACTICE OF MEDICINE AND THERAPEUTICS.

NEUROSES DUE TO TOBACCO HABIT—TREATED BY STRYCHNIA.—Dr. L. B. Edwards (*Virginia Medical Monthly*) lays great stress on the use of strychnia in acute neuroses due to tobacco habit, especially cases marked by nervousness, muscular irritability, tremor, etc., the result of smoking. He mentions a case of acute shaking tremor of the hands, due to tobacco, in which he injected one-nineteenth of a grain of strychnia hypodermically. Within fifteen or twenty minutes thereafter the muscular control of the hand, of the side in which the injection was made, was nearly perfect, and the general nervousness was perceptibly modified.

MORTALITY OF RAILROAD MEN, MARINERS AND TRAVELERS.—Dr. Holden (*American Jour. Med. Sciences*, Jan., 1876) presents evidence showing that (1) the occupation of seafaring men is more hazardous than is generally supposed. (2) Railroad employes (excepting brakemen) are as much as, and perhaps more likely to attain long life than other classes of men. (3) Travelers, unless when too long delaying in unhealthy climates, and so becoming residents, do not especially increase their liability to death.

TRANCE—ITS NATURE AND PHENOMENA.—Dr. Geo. M. Beard (*Archives Electrology and Neurology*, May, 1876) gives us a careful and able study of trance. He describes trance as a passive state, conscious or unconscious, either physiological or pathological, in which the mind passes from the control of the will, and in the milder and conscious state acts through the senses in obedience to some prominent idea or external suggestion, with various mental and physical manifestations, and in the rarer and most advanced stages goes on to protracted suspension of the active vital functions.

Trance differs from sleep in the following general features: (1) The trance subject acts out his dream, while in sleep the dream does not cause any corresponding physical phenomena. (2) The performances of the trance are logical, coherent and consistent, while dreams are filled with extravagance and absurdities, which to the sleeper seem entirely proper. (3) In trance some of the senses are perfectly sealed. The loudest noises are not heard, the most fragrant odors are not observed, and there is no power of taste. Other senses may be unduly exalted. On the other hand, the soundest sleepers are awakened by loud noises or by sufficiently irritating the sensitive nerves. (4) Trance subjects are capable of responding to suggestions offered by a second party, or from any external source, and become consciously obedient to those suggestions. Sleepers present no such peculiarity. (5) In some forms of trance there may be double or divided consciousness. The subject, on coming out of the trance, has no recollection of his experience while in it. On again entering the trance, he resumes the experience of the previous attack where it left off, as though no active life had intervened. In sleep there is no such continuity of existence from one nap to another.

Symptoms of trance:—

(1) Closing of the eyes and fixity of position, with gradual loss of volitional power. (2) Flushing of face and eyes, with sensible and cold perspiration and coldness of extremities. (3) Sighing respiration and rapid pulse, with evidences of oppression and pain. (4) Mild or violent involuntary muscular motions. (5) Involuntary mental action, with

exaltation or depression of the senses and of the mental and muscular powers. (6) Illusions and hallucinations of various kinds. (7) Various hysterical symptoms. (8) Profound sleep, with protracted suspension or diminution of active vital functions. He classifies trance as (1) spontaneous; (2) self-induced; (3) emotional; (4) intellectual. Of the therapeutic uses of trances he says they are not recommended as a regular procedure in important cases. The article from which we have made these abstracts is worthy of the careful study of all physicians.

INEBRIATES—THEIR TREATMENT.—Dr. N. S. Davis (*Journal of Nervous and Mental Diseases*, Jan., 1876) recommends such alteration of our system of medical jurisprudence, as that simple voluntary intoxication be recognized as a misdemeanor, subjecting the offender to arrest and proper punishment, and habitual intoxications or confirmed drunkenness a dangerous disability, subjecting the party convicted of the same to legal detention and dicipline in a public asylum or institution established for that purpose. This course would not only result in restoring a large proportion of the victims of inebriation to sobriety and usefulness, but it would do more to create in the public mind, among all classes of society, a correct idea of the nature and tendencies of intoxicating drinks, than could be accomplished in any other way. Instead of continuing the erroneous belief among the young and laboring classes that alcoholic drinks are restorative, and in moderate quantities beneficial, and that a convivial spree now and then is only a harmless indulgence, it would practically and indissolubly connect the use of intoxicants with the idea of physical and mental impairment, social degradation and final disability —a result which would be in strict accordance with the truths of science and the interests of humanity.

GENERAL PARALYSIS—CONDITION OF URINE.—Dr. Merson (West Riding Lunatic Asylum Reports) sums up an interesting paper as follows:

(1) The quantity of urea varies above and below, the average of health being in the majority of cases considerably increased. Probably the uric acid is increased.

(2) The quantities of chlorides and phosphoric acid are notably diminished; that of sulphuric acid remains about normal.

(3) The specific gravity varies within wider limits than in health, but the mean does not differ materially.

(4) The absolute quantity of urine passed is slightly below the average of the healthy cases examined, but estimated according to weight of body, the amount excreted by seventeen general paralytics was slightly in excess of that excreted by six healthy men.

(5) Under the influence of calabar bean there is a considerable diminution in the quantity of all the solid constituents, especially the urea. The results obtained in the three cases treated with alcohol are in favor of the view that both the quantity of urine and the amount of solid constituents are diminished under the influence of that substance.

EPILEPTIC SYMPTOMS AS RELATED TO AURAL DISEASES.—Dr. Moos (*Allg. Zeit. fur Psychiatrie—Journal Nervous and Mental Diseases*, Jan., 1876) in a paper upon the connection between epileptiform symptoms and diseases of the ear, classifies the complicated reflex disturbances as follows:

(1) Reflex epilepsy. To this head belong cases from foreign bodies in the outer ear, and purulent inflammation in the middle ear.

(2) Reflex hemiplegia. In this list come the cases in which insects have found their way into the external auditory passages, producing the irritative phenomena.

(3) Reflex psychosis.

Dr. Moos detailed a case of reflex epilepsy observed by himself. The patient was a boy eight years old; the attacks occurred every four to eight weeks, and lasted two or three hours; were attended with loss of consciousness and a fixed, staring countenance, but without convulsions; they ended with an attack of vomiting. The eustachian tube of the right ear being found impervious, the tympanum was twice incised before the ear trouble and the accompanying neurosis could be cured. Dr. Moos explains these symptoms as follows: There was an hereditary predisposition. The inflammation of the middle ear became purulent. This produced an irritative condition in the tympanic plexus, which centripetally propagated itself to the brain, and produced such structural alterations as manifested themselves in these epileptic phenomena. Ear troubles and convulsions are frequent in children. Is it not possible that the starting point of the convulsions is more frequently in the ear than has been generally supposed?

TOBACCO AND ANGINA PECTORIS.—Dr. Dickson (*St. Louis Medical Journal*, November, 1875) quotes the observations of McBean, published in 1862. These observations were quite numerous and showed that cigar smoking, by impressible persons of sedentary habits and overworked minds, is specially liable to produce angina pectoris. Two years later, Dr. E. Decaesin presented a series of one hundred cases respecting the pernicious action of tobacco smoking upon the heart.

CHRONIC SUB-ACUTE NEURITIS.—Dr. H. M. Bannister (*Chicago Journal Nervous and Mental Diseases*, October, 1875), reports a case of the above obscure disorder, and gives a full discussion of the literature of the subject. From these data he concludes:

(1) Chronic sub-acute inflammatory affections of peripheral nerves occur not only often independently of other diseases, but also as frequent and very important factors in the pathology of many general disorders.

(2) Many so-called neuralgias and forms of paralysis often referred to central disease, find their true explanation in the recognition of this condition in peripheral nerves. It does not follow that central disease may not co-exist with an affection secondary to the peripheral disorder; we have seen phthisis accompany sub-acute neuritis of the ulnar nerve from compression and cold, and there is no question that many severe central troubles arise from the centripetal propagation of peripheral neuritis.

(3) Neuritis may be a secondary consequence of central disorder, and in these cases is likely to be overlooked. It may, however, so complicate the symptoms as to mislead the physician and induce him to attribute to serious central lesions that which is simply due to secondary peripheral disorder, thus in some points affecting the correctness of the diagnosis.

(4) A merely irritative process in a nerve trunk may, and often does, become an active inflammatory condition in its more vascular tracts.

(5) Notwithstanding the fact that many cases undergo a rapid and even spontaneous cure, early recognition of the disease and proper remedial measures are important on account of its tendency in many cases to extend itself toward the nervous centres. When the disease has reached the plexuses, it is beyond the reach of active treatment, and the prognosis is not too promising. It may also involve the cord, producing serious and fatal lesions.

(6) In the treatment of sub-acute neuritis, the measures which promise the most favorable results are as complete rest as possible for the affected parts, and the use of the constant galvanic current. Other means should be employed on general principles, recognizing always the nature of the morbid condition—an irritative or sub-acute inflammatory process—causing generally proliferation of connective tissue, and compression and atrophy of nervous elements.

INSANE—CLINICAL EFFCTS OF CHANGES IN BLOOD VESSELS OF THEIR BRAINS.—Dr. Atkins (*Dublin Journal Medical Science*, June, 1875), gives an interesting account of his recent studies concerning the condition of the cerebral blood vessels of the insane. Following this is pictured the clinical effects of such changes. Thus, should active hyperæmia be the initial cause, over-nutrition of the brain cells will take place, exaltation of function will follow, the ideas will flow free and fast, fancy will be excited, imagination roused, motor impulses become uncontrolled and acute mania results. Should this active hyperæmia change to passive congestion and stasis occur, a lowering of nutrition takes place, depression follows exaltation, the ideas come slow and shallow, indifference succeeds excitement, motion becomes impeded and sluggish, and secondary dementia gradually supervenes. Should stasis persist, organic changes in cell elements ensue, blocking up of the outlets for waste products follows, resulting in the infiltration of these products into the tissues; apathy succeeds indifference, consiousness and volition are gradually abolished, the calls of nature neglected, and the unfortunate sufferer sinks into a state of hopeless fatuity, life being often prolonged until the completely disorganized nervous system can no longer sustain the weight it has to bear.

BRAIN LESION—REMARKABLE CASE.—The St. Louis *Clinical Record* publishes the following: A man living near Leavenworth, Kansas, died from morphia a short time since. Previous to his death, during a residence in the penitentiary, he had been in the habit of running wires and nails through his own skull. At post-mortem examination two openings were found in the skull, one, made by the prisoner with a brad-awl, near the inferior posterior angle of the right parietal, and another near the superior posterior angle of the same bone. In the brain a wire was found introduced through the upper opening, just missing the superior longitudinal sinus; it had pierced to the base of the brain, a little in front of the fissure of sylvius. The corpus striatum was not wounded. A nail, one and three-fourths inches in length, was found lying beside the wire. Although wires had been removed during life from the lower aperture, no trace of their course was observed. The patient, though of a suicidal tendency, did not appear insane, and could do his work with correctness and understanding.

URINE—ITS CHANGES DURING ACUTE FEBRILE DISEASES.—Dr. L. Duncan Bulkley (*Archiv. Dermatology*, October, 1875), gives the following as the changes which occur in the urine during acute febrile diseases:

(1) In erysipelas the urea in the urine is increased somewhat, the uric acid augmented threefold, the chloride of sodium diminished, and albumen not unfrequently appears.

(2) In measles the urine is rich in uric acid and urates; lower products of metamorphosis, albumen and blood are not uncommon.

(3) In scarlet fever the urea is not necessarily increased; uric acid is almost entirely suppressed at first, and largely in excess at the close of the fever. The chloride of sodium is diminished. Sediments of uric acid and urates are common, and albumen and epithelium and casts generally appear.

(4) In small-pox the quantity of urine is diminished and its specific gravity not proportionately increased; uric acid is precipitated, and the chlorides are diminished; albumen is sometimes seen.

URINE—ITS ALTERATIONS DURING CHRONIC SKIN DISEASES.—Dr. L. Duncan Bulkley (*Archiv. Dermatology*, October, 1875), says that the alterations of the urine in chronic skin diseases are of two kinds: *first*, those due to assimilative disorder, corresponding to those known to accompany derangement of the liver, dyspepsia and alterations due to hereditary disposition—a diathetic state, closely allied to gout and phthisis, and *second*, those due to interference in the functions of the skin, as in extensive ichthyosis and xeroderma, or in eczema or psoriasis, covering much of the body where the urinary changes may be regarded in a measure as secondary to the skin lesion.

(1) *Urticaria* is associated with a diminution of the urea and the organic salts in the urine, and their probable retention in the system. The quantity of the urine is small and the specific gravity high; urates and oxalates abound.

(2) *Erythema.* Here the urine is persistently acid with either an abundant deposit of urates or oxalate of lime.

(3) *Eczema* patients seldom pass large amounts of urine; the tendency is to scanty secretion almost always unnaturally acid, with a specific gravity averaging above the normal. Full uric acid; the urates and oxalate of lime abound, sometimes oxaluria is very persistent; albumen is rarely seen. The urea and uric acid are often below the normal standard, though they may be in excess when a large portion of the integument is affected; indican has been found in pathological quantities; where the specific gravity is high it may be due to an increase in the sulphates if the chlorides are diminished.

(4) *Psoriasis* sometimes alternates with phosphatic urinary deposits in gouty subjects. Where the excretory functions of the skin are much impaired the urea is above the normal. The fixed salts are increased, the urine shows generally a hyperacidity with deposits of uric acid, urates and oxalate of lime, the contrary being rather the exception. The specific gravity is liable to great variations.

(5) *Acne.* Urinary deposits are very common in acne, generally those of dyspepsia, the quantity and specific gravity varying greatly. Generally over acid, the urine deposits oxalate of lime, urates and uric acid. It is not uncommon to find the phosphates increased.

(6) *Pruritus* often gives very abundant uratic deposits, and sugar is sometimes present. In the aged pruritus is often accompanied or preceded by diminished secretion of the urine. The specific gravity may vary greatly.

(7) *Herpes zoster.* The chlorides and phosphates are increased and the sulphates diminished. Oxalate of lime is present.

(8) *Pemphigus.* The sulphates and earthy phosphates are increased, chlorides diminished, urea greatly above normal, oxalate of lime occurs. The quantity is small, specific gravity high, and reaction very acid.

(9) *Purpura.* Albumen, blood and casts are sometimes found. The earthy phosphates, ammonia and uric acid are increased, chloride of sodium diminished. The urine is scanty, with a low specific gravity, and faintly acid reaction, giving traces of bile pigment.

(10) *Melano Sarcoma.* The urine is brown, often of a dark copper color, at times depositing urates abundantly. The deep color is due to pigment particles alone or enclosed in epithelial cells. The urine very acid, specific gravity about normal, and towards the end of life the quantity of urine is much diminished.

(11) *Elephantiasis Græcorum.* Albumen is common, and the urea is diminished in the urine.

(12) *Addison's Disease.* Quantity of urine small, specific gravity generally low, solid constituents deficient, albumen sometimes.

(13) *Ichthyosis.* The quantity of urine is large and the specific gravity low, but the urea, though giving a small percentage, is unaltered in its total daily quantity.

(14) *Xeroderma.* Urine diminished in quantity, varying in reaction, alkaline and acid, depositing when alkaline a large quantity of amorphous phosphates or clear acid with oxalate of lime.

HÆMOPTYSIS TREATED BY ERGOT—REPORT OF FIFTY CASES.—Dr. J. M. Williamson (*London Lancet*, January, 1876) reports fifty consecutive cases of hæmoptysis treated by ergot. Out of these the drug rapidly checked bleeding in forty-four cases. In the other six it failed, as did also gallic acid.

CAN TUBERCULOUS MATTER TAKEN AS FOOD EXCITE TUBERCULOUS DISEASE?—Prof. Gurlack (*Edinburg Medical Journal*, October, 1875), gives an answer to this inquiry based upon experiments. He fed animals one or two doses of tuberculous matter by the stomach. The effects were observed, and if the animal did not die it was killed after some weeks and a post-mortem examination made. As conclusion he says:

(1) There is a specific virulent material in tubercle, and many of the symptoms of tubercular disease are due to the absorption of this virus.

(2) This virus exists in tubercle in all its stages, but apparently in greater intensity in cheesy masses. It is found in recently formed tubercle, and in miliary tubercle.

(3) The infection begins first in the mucous membrane of the mouth, and if the tubercular matter be in contact a sufficient length of time with the mucous membrane of the alimentary canal, it may communicate the disease to the whole lymphatic system.

(4) While tubercular disease has special characters in different animals, all tubercular matter, when introduced into the alimentary canal from one species to another, is more or less virulent.

(5) The tubercular matter of birds, especially that of the common hen, is very virulent, and is identical in its action with that of mammalia.

(6) The fibrous tubercle of horses without a trace of cheesy formation, is just as infectious as the miliary tubercle of cattle.

(7) The flesh of tuberculous animals is also infectious, though in a much less degree than tubercle itself.

(8) Tubercular material cooked for a quarter of an hour, is still infectious, though in a less degree than that not cooked.

(9) The effects of poisoning by tubercular matter taken into the alimentary canal, are irritation of the mucous membrane both of the alimentary and respiratory tracts, enlargement and tenderness of the lymphatic glands, enlargement of the bronchial glands, and the formation of tubercle in the lungs and other organs.

PULMONARY CONSUMPTION—THE THREE FORMS OF ITS LESIONS.—Ruehle (Ziemssen's Cyclopædia, Vol. V.) gives these as follows:

(1) A *simple chronic pneumonia* of the apex of the lungs, in which the changes are only those of simple chronic indurative inflammation.

(2) *Broncho-pneumonia*, in which the first change is the formation of clusters of noctular foci, which excite inflammation in the surrounding parts and coalesce with the inflammatory products thus formed. The whole mass then becomes caseous and breaks down in numerous places, forming ulcerating cavities, and thus the destructive process may steadily advance until it extends beyond the upper lobe, or it may be arrested by the occurrence of simple inflammations resulting in induration.

(3) The third form consists of morbid processes, which begin in the bronchi and there produce inflammatory infiltration and swelling of the entire thickness of their walls, with caseation and dilatation. Ulcerative destruction then occurs, pneumonic processes are set up by the extension of the disease into the parenchyma, and the inflammatory products thus formed either become necrosed and break down into caseous matter, or undergo induration resulting in limitation and cure.

PHTHISIS IN NEW YORK CITY DURING 1873.—Dr. E. Harris (Report Board of Health of New York City, 1873), deduces from statistics for that year the following facts:

(1) The female portion of the population of New York, though nearly 30,000 more numerous than the male sex, suffers a less number of deaths from pulmonary phthisis than the latter, and also suffers a less mortality from all causes.

(2) In both sexes and in the entire population, from the twentieth to the seventieth years of life, and largely indeed in the five years preceding and in a decade following that period of five decades, phthisis is steadily the great destroyer.

(3) The greatest mortality from phthisis in this city is experienced in the months of March, December, January and February, dividing a three months total about equally, and the mortality from this disease gradually diminishes until the full summer season arrives.

(4) Of the foreign born residents of the city, those from Ireland suffer far the heaviest rate of mortality from phthisis.

(5) The colored race in this city (13,800 in number) suffered a rate of mortality from phthisis *about fifty per cent* greater than that given by the whites.

PATHOLOGY OF PNEUMONIA — EXPERIMENTAL RESEARCHES. — Dr. Dreschfeld (*Doctor*, May, 1876) has experimentally investigated the pathology of pneumonia. The animals employed were rabbits. In his first series he produced pneumonia by section of the vagi; in his second series by injection into the lung of an irritating fluid (five to twenty per cent solution of nitrate of silver). His conclusions are:

(1) Both by section of the vagi and by injection into the lung of nitrate of silver an irritative inflammation is produced in animals comparable to the acute catarrhal pneumonia in man.

(2) The first stage in this process consists in an active proliferation of the epithelial cells, lining the alveoli, which became detached from the walls of the alveoli, increase in size, become more granular, and show multiplication of their nuclei and thus give rise to new cells. The small cells with the hyaline nucleolus, above described, are probably the young cells so formed.

(3) The capillaries in the neighborhood of the alveoli undergo an active hyperæmia, the white blood corpuscles accumulate in them, and eventually emigrate into the alveoli.

(4) The epithelium, after the process of proliferation is completed, undergoes fatty degeneration.

SYPHILIS—IS IT EVER A CAUSE OF PHTHISIS?—Dr. N. W. Thoreson (*Norsk. Mag. for Laegeridenskaben—N. Y. Med. Jour.*, September, 1875) gives us the result of an able investigation of this subject. The history of three hundred and eighteen syphilitic parents is given, as well as that of their children. It was often found that a syphilitic mother gave birth to a healthy child, which was nursed by her and remained healthy, and if the mother was not treated the next child might have marked hereditary syphilis, or present other signs of ill health. In several instances several healthy children were successively born of such a mother, who then gave birth to syphilitic children. Others had syphilitic children, and then gave birth to perfectly healthy ones. In no case, however, could the origin of phthisis be traced to syphilis in the parents. It was constantly found that where the children had tubercles, there was a history of this disease in their ancestors. Of the whole number of syphilitic individuals examined there were only sixteen who had tuberculosis. In all of these there was a family history of tuberculosis. In nine tuberculous individuals who became syphilitic, the course of the latter was very disastrous. The condition of those twelve tuberculous persons who had not had tuberculous deposits was carefully watched, and though most of them had severe syphilitic accidents, none of them had any chest affection, or any other manifestation of tuberculosis. The author concludes that syphilis has no casual relation whatever to tuberculosis, though the latter dyscrasia renders the prognosis of syphilis bad, just as any other depressing condition would.

PHYSIOLOGY.

PANCREAS—APPEARANCE PRESENTED DURING DIGESTION.—R. Heidenhain (*Lond. Med. Record*, Feb. 15, 1876—*Pfluger's Arch.*) observed the following appearances of the pancreas, presented at certain stages of digestion: (1.) During hunger the granular inner zone occupies the larger, the homogeneous outer zone the smaller part of the cells. (2.) In the first period of digestion, during which a plentiful secretion occurs, there is diminution of the entire cells by using up of the granular inner zone; then additions of new materials to the outer zone, so that this becomes enlarged. (3.) In the second period of digestion, during which the secretion diminishes and comes to a stand-still, there is a new formation of the granular inner zone at the expense of the homogeneous outer zone, most pronounced diminution of the latter and increase of all cells. (4.) With long-continued hunger there is gradual increase of the latter to their original dimensions, and therewith slight diminution of the inner zone. During the state of physiological activity there is a continual change in the cells—metamorphosis internally, addition of matters externally. Internally there is conversion of the granules into secretory constituents, externally employment of the nutrient materials for the formation of the homogeneous substance, which again becomes converted into granular masses. The average appearance of the cells depends upon the relative rapidity with which this process occurs. In the first period of the changes there is a more rapid consumption internally, and more rapid additions externally. In the second period the most rapid changes occur at the limit between the outer and inner zones, in that the substance of the former becomes converted into that of the latter. During the condition of hunger the consumption is at a minimum, and the addition takes place also more slowly; but it is still obvious, in the apparent increase of the outer zone, which had almost disappeared. Corresponding to these histological changes, the chemical and experimental results of the author showed that pancreatin ready prepared does not exist in the living gland cells, but only its peculiar mother substance, and under certain circumstances pancreatin becomes free. The mother substance, called zymogen, is probably a compound of pancreatin with an albuminate. With plentiful secretion from the gland the quantity of zymogen diminishes, to be again regenerated during rest of the organ.

It is further shown that the secretion of water by the gland can be influenced by the medulla oblongata, and from the author's experiments it is extremely probable that the secretion of the solid constituents of the gland cells and that of water do not go hand in hand, but that each seems to be under the direct influence of the nervous system. The formation of pancreatin is connected with the complicated decompositions in the secreting cells, the development of a free acid playing a part in the process.

A READY METHOD OF PREPARING SECTIONS OF DISEASED TISSUES FOR THE MICROSCOPE.—Dr. Stevenson (*Edinburgh Med. Jour.*, January, 1876) obtains excellent results from the following method: Two drachms of glycerine mixed on a slab or plate with one and a half drachms of gum tragacanth. The tissue to be sliced is placed in a pill box, and the mixture poured on it until the box is full. It is now allowed to stand in a cool place for from eight to twelve hours, when it will be ready for slicing. In cutting it will be found best to moisten the surface by dipping in spirits, and also by moistening the upper surface of the knife, so that the section may float as it is cut. If sections are not made at once the cake should be placed in alcohol. If the tissue has been previously in spirit it must be steeped a few hours in cold water before embedding.

THE NORMAL URETHRA AND ITS CONSTRICTIONS IN RELATION TO STRICTURES OF LARGE CALIBRE.—Dr. R. F. Weir (*N. Y. Med. Jour.*, April, 1876) gives the results of some careful studies of this subject: From these he shows that, (1) the spongy portion of the urethra is the smallest (except the meatus) and least dilatable portion of the canal; (2) normal constrictions are to be met with in this portion of the canal, as small certainly as No. 29; (3) the healthy urethra in this portion can generally be readily and safely be dilated up to an average size of thirty-three millimetres; (4) the normal size of the meatus is from No. 21 to No. 28; (5) the urethral canal is, in the excellent words of Jargavay, "narrow at the meatus, dilated in the gland, and very slightly narrowed at the termination at the fossa navicularis; then it forms a cylinder where a coarctation is often found. It enlarges then to the bulb."

VOMITING—ITS PHYSIOLOGY.—Dr. T. Lauder Brunton (*Practitioner*) gives the following summary of our knowledge on the subject:

(1.) Vomiting consists of two factors—the opening of the cardiac orifice by the contraction of the longitudinal fibres of the œsophagus and the simultaneous compression of the stomach by the abdominal muscles and diaphragm.

(2.) When innervation is disturbed, these two factors do not occur together, and thus retching may occur without vomiting.

(3.) The movements of vomiting are correlated by a nervous centre in the medulla oblongata, from which impulses are sent down through various motor nerves to the muscular structures engaged in the act.

(4.) This nervous centre is probably closely connected with the respiratory centre, but is not identical with it.

(5.) It is usually set in action reflexly by irritation of the pharyngeal, gastric, hepatic, enteric, renal, uterine, ovarian, and possibly, also, by the pulmonary and vesical nerves, which come from the periphery towards it. It may also be excited by impressions sent down to it from the brain.

(6.) Vomiting may be arrested in two ways: either by removing the irritant which is exciting the vomiting centre, or by lessening the excitability itself, so that the centre no longer responds to the impressions made on it from without.

ELECTRO-MOTOR PHENOMENA IN THE COATS OF THE AORTA POST-MORTEM.—Dr. Tidy (*Lond. Lancet*, Mar., 1874) gives some of the results of a series of experiments upon the electrical condition of the coats of the aorta post-mortem. These are very interesting as physiological facts, and may have a medico-legal bearing.

(1.) The aorta, cut up into pieces about the size of a shilling, and arranged so that the outside coat of one piece was in contact with the inside coat of the next, produced a distinct galvanic current, apparently perfect when the two ends were connected with a delicate galvanometer.

(2.) Ordinarily, this action does not last longer than three hours and a half to four hours after death, the period being tolerably constant in all animals.

(3.) In some diseases the period was less than this, as in phthisis and wasting diseases generally and in typhoid fever.

(4.) In animals poisoned with aconite the period during which the galvanic action lasted was considerably longer than usual, and sometimes even double the time.

Urea—Its Relations to Work.—From an extended review of Dr. Pavy's investigations into the amount of nitrogenous excreta eliminated by Mr. Weston during two days of his extraordinary walking feats, the *British Medical Journal*, Mar. 17, 1876, concludes "that the amount of urea excreted corresponds to the general tissue change, and not to the amount of muscular exercise; and that we work at the expense of our non-nitrogeneous food, and not at the expense of our albuminous tissues."

Fresh Brain Tissue—A Rapid and Simple Method of Preparing, Staining and Mounting.—Dr. John H. Arbuckle (*Glasgow Med. Jour.*, April, 1876) gives the following method, which, for observing the minute details of structure, is superior to all others:

The glass shell is first made perfectly clean; a small thin section of brain is made with a sharp scalpel, previously wetted with water; the section is placed on the slide. The under surface of the cover is well oiled with a drop of oil of cloves, and placed over the brain substance with the oiled surface next to it. It is then pressed till the thinnest film of brain only remains between the cover and the slide. The whole is then immersed in a small saucer containing methylated spirits, which gradually finds its way between the slide and cover, and dissolves the oil of cloves. After remaining in the spirits for a few moments the slide is taken out; a few drops of spirits are put upon the slide, and the cover is at one edge gently raised, when a greater quantity of spirits gets between the cover and the slide. The cover is now lifted off, and the brain substance remains upon the slide in a thin film.

To stain this film it is first placed in spirit, and after a few seconds removed, and the spirit allowed to run off. A drop of solution of aniline (g. i to ʒ i) is now placed on the film. This is allowed to act for a couple of minutes, and then all the superfluous solution washed off by placing the slide in a basin of clear water. On removing the slide from the water it is placed in clear spirit or absolute alcohol to further dehydrate it.

To mount the film the slide, after fifteen minutes, is removed from the spirit; the film is cleansed by a drop of oil of cloves. When transparent all the oil is run off, the slide cleaned, and a drop of Canada balsam dissolved in benzole is put upon the brain film; then the cover is placed on it, and when allowed to dry it is permanently mounted.

The whole process need occupy but a few minutes.

Skulls—Ancient and Modern.—Prof. Rolleston (*Brit. Med. Jour.*, Sept. 4, 1875) says the largest result to which craniometry and cubage of skulls have attained is, to my thinking, the demonstration of the following facts, viz.: First, that the cubical contents of many skulls, from the earliest sepultures from which we have any skulls at all, are considerably larger than the average cubical contents of modern European skulls; and secondly, that the female skulls of those times did not contrast to that disadvantage with the skulls of their male contemporaries which the average female skulls of modern days do, when subjected to a similar comparison.

Structure of the Cornea.—Dr. Thin (*Edinburgh Med. Jour.*, Nov., 1875) gives the results of a careful study of the cornea by new methods. He finds that "the ground substance of the cornea consists of parallel bands, whose breadth is nearly the diameter of a red-blood corpuscle, and whose thickness is somewhat less than their breadth. These bands, now described for the first time and called primary bundles, are covered by narrow, elongated, flattened cells, after the manner of an epithelium. Injected masses can be made to pass between the primary bundles, the spaces into which they pass being the corneal tubes of Baedman. These tubes are not, therefore, canals with a complete, unbroken wall, but are the spaces left between the bundles on account of the somewhat cylindrical or beveled form of their borders. The walls of the corneal tube are formed by parts of the surface of several contiguous bundles. The primary bundles are collected in larger bundles, and on the surface of these larger bundles are found layers of small, flattened polygonal cells. The junction of the cells of the primary bundles, with those of the secondary bundles, shows that there is a continuous free surface for the passage of the fluid from the surface of the layer into the corneal tubes between the primary bundles.

The secondary bundles are combined so as to form large, flattened tracts, which are separated into distinct compartments by a membranous investment, which is covered by epithelial-like cells. If it were necessary to give these tracts a distinctive name, the term tertiary bundles might be applied to them. These are further arranged in layers, which can be appreciated by the naked eye, and the surfaces of which are covered by the larger cells.

The flat cells of the cornea being thus arranged in layers, may fulfill all the functions which are usually attributed to the epithelium of a serous membrane.

Between the primary bundles are chains of a very small spindle cell, the processes of each cell anastomosing with those next it.

In the spaces left by the separation from each other of the laminæ, formed by the bundles, are the large stellate cells, from the borders of which radiate in every direction a great number of transverse processes. The nucleus of this cell has formed the basis of the notions generally taught regarding the corneal cells. The processes of the stellate cells pass between the bundles of the upper and lower laminæ, thus binding together the bundles and laminæ. The anastomosing fibres penetrate between the flat cells at the angles constituted by their points of junction.

IS THE CORTEX CEREBRI EXCITABLE?—Dr. E. Dupuy (*Bost. Med. Jour.*, Apr. 6, 1876), after a review of the celebrated experiments of Fritsch, Hertzig, Ferrier, Charcot, Jackson, etc., gives the following as his own opinions respecting the so-called motor centres of the cortex cerebri. The application of electrical stimulation to the surface of the cerebrum produces movements which are of reflex origin, and excited by the irritation of nerve fibres, starting from the pia mater and accompanying the blood vessels thence to deeper lying centers, whose positions we do not know. The evidence of such fibres is susceptible of demonstration. In several experiments Dr. Dupuy had found that when the pia mater is carefully destroyed by the actual cautery at the seat of a supposed "centre," and then the animal allowed to recover, and afterwards again examined, the movements are no longer to be produced by excitation with electricity at that point, though they still follow similar excitations in the immediate vicinity.

The motor regions of the cortex, according to this view, differ from the rest on account of peculiarities in their vascular supply, the vessels seeming at once to penetrate deeply into the brain; and it is possible that the movements are due to localized arterial branches being supplied by different nerve fibres.

LIGHT—ITS PHYSIOLOGICAL EFFECTS.—Drs. Dewar and McKendrick (*Trans. Royal Society of Edinburgh*), from experiments, think they have established the following points:

(1.) The impact of light on the eyes of members of the following groups of animals, viz: Mammalia, aves, reptilia, amphibia, pisces and crustacea, produces a variation amounting to from three to ten per cent of the normal electro-motive force existing between the corneal surface and the transverse section of the optic nerve.

(2.) This electrical excitation may be traced into the brain.

(3.) Those rays that we regard as most luminous produce the largest variations.

(4.) The alteration of the electrical effect with varying luminous intensity seems to follow very closely the ratios given by the psychophysical law of Fechner.

(5. The electrical alteration is due to the action of light on the retinal structure itself, and is independent of the anterior portion of the eye; therefore the natural supposition that the contraction of the iris might produce a similar result cannot be sustained.

(6.) It is possible, by experiment, to discover the physical expression of what is usually called, in physiological language, fatigue.

(7.) The method employed in this research may be applied to the investigation of the special organs of the other senses.

PARTURITION—CAUSE OF ITS COMMENCEMENT.—Dr. C. M. Crombie (*Lond. Lancet*, April, 1876) maintains that labor is but the completion of action which began when conception took place. He holds that the uterus in the human, as in other animals, is a part of the oviduct, but greatly modified; that the primary function of the oviduct is the discharge of the egg, and retention and development of it only secondary; and further, that there is nothing to distinguish the uterus from the rest of the oviduct, except the protracted continuance of its functions. The evidence of uterine activity during gestation is varied. The great muscular development of the organ points to it, for it is contrary to physiological and pathological laws that a muscular organ should grow while completely at rest.

The phenomena of abortion and premature labor, and the possibility of inducing premature labor; the sensations referred to the quickening of the child, which are believed to be due mainly to the movements of the uterus; the gradual approach of the actual process of labor—all suggest that the uterus is active during the whole of gestation. Further, the contractions of the organ have been actually observed in the course of pregnancy, occurring regularly and alternately with expansion. Though the uterus struggles from the first to expel its contents, it fails to do so until the reduction or withdrawal of the conditions that during gestation prevent the activity of the organ from producing such an effect. These conditions are the attachment of the ovum to the uterus, the condition of the cervix uteri, and the relation of the liquor amnii to the fœtus. The latter fluid, though increased in quantity, yet relatively to the fœtus, is diminished towards the end of a pregnancy, and after labor has really set in becomes discharged; then the uterus acts to advantage, and expels the fœtus.

THE WEIGHT OF NEW-BORN CHILDREN.—Dr. E. Ingersley (*Lond. Obstet. Jour.*, March, 1876), from an extended series of researches on the loss of weight in infants, reaches the following results: Every child loses weight during the first days of extra-uterine life. An increase may occur on the first day if the meconium have escaped during birth, or if it have not been discharged before the first weighing, and the child have sucked in the meantime; but this increase is only transient, and the loss of weight shows itself at the second and third weighings.

The loss corresponds to one-fourteenth or one-fifteenth of the body-weight, and is both absolutely and relatively greater in children of primaparæ. It was greater in boys than in girls, but was more rapidly compensated in them. With regard to the original weight of the body, the loss is greater the less developed the child is, and in the same proportion the increase is more delayed; premature children show a corresponding relation. The increase begins, as a rule, on the fourth day. As regards the conditions influencing the loss, no connection can be found between the detachment of the umbilical cord and the commencement of the increase; but the chief importance must be attached to the relation between the egesta and ingesta. About half the loss can be ascribed to the meconium and urine. The remainder of the loss must be applied to a consumption of the child's structure, to apply the forces needed to live. The child cannot eat enough to compensate for this loss. The consumption of tissue and consequent loss of tissue are a physiological necessity.

SURGERY.

WOUNDS, AS RELATED TO THE INSTRUMENTS WHICH PRODUCE THEM. —Dr. Wm. Macewen (*Glasgow Med. Jour.*, January, 1876) gives us a careful study of seventy-one cases, including one hundred and four wounds, produced by fifty-one different articles. He concludes:

(1.) Blunt instruments sometimes produce scalp wounds having straight outlines and sharp, clean edges, which, in these respects, could not be distinguished from the wounds produced by sharp cutting instruments.

(2.) Scalp wounds, which exhibit entire hair bulbs projecting from the surface of their sections, have been produced by blunt instruments.

(3.) Wounds exhibiting nerve filaments, or minute blood vessels bridging the interspace between the lips of the wound toward the middle of the depth of the section, while the tissues have receded all around them, below as well as above, have been produced by blunt, non-penetrating instruments.

(4.) When a wound, even with sharp, well-defined margins, bears in contour a resemblance to an osseous ridge in close proximity, there is a *probability* that it was produced by a blunt instrument, through forcible impact against the underlying osseous ridge.

(5.) *Cut* hairs found in the immediate vicinity of a wound are valuable aids in determining whether a sharp or blunt instrument has been made use of.

(6.) As to the diagnosis between wounds produced by instruments of the knife kind and other sharp-edged substances, such as glass, earthenware, etc., no dependence can be placed on the mere regularity of outline or sharpness of edge, or the reverse.

(7.) Sharp, clearly-defined wounds, in certain cases, present peculiarities in their termination, which may be sufficient to enable a probable diagnosis as to whether they were produced by a knife or portion of glass or earthenware.

(8.) The same instrument used by the same person in delivering several successive blows may produce wounds of different characters.

THORACIC ANEURISM TREATED BY ELECTROLYSIS.—Dr. H. I. Bowditch (*Bost. Med. Jour.*, January, 1876), from his own experience and that of others, shows that of the cases thus treated a little less than one-third die soon. A little more than one-third are either cured or relieved. Less than one-fifth are cured, and even these have relapses. He believes that, respecting the operation, the following principles are correct:

(1.) In any case in which treatment such as Valsalva's, as modified by Tuffnell, or still further, as suggested by Bowditch, and in which there can be no doubt from the physical exploration of the chest that aneurism of the arch of the aorta exists, if, moreover, we find that the lungs are not very much involved, if we have made up our minds that the case tends certainly to death, perhaps attended with severe suffering—in such a case there can be no doubt that we should be justified in advising electro-puncture for relief, at least, and with the hope of a cure of the aneurism, though it be small.

(2.) As to how it should be done—whether by applying to the needles the positive pole or the negative, or both, or one or the other alternately—I think no decision can be made further than this: the positive pole causes a firmer clot and disengages less gas than the negative.

(3.) A mild current should be used at first and continued for some time.

(4.) Absolute rest before and after the operation, if possible, in a perfectly horizontal posture, should be maintained for months.

(5.) In regard to drugs, I should be governed by circumstances—gentle laxatives are admissible—perhaps digitalis, if the pulse be too rapid. Iodide of potassium might be tried, also cold or compression; if need be leeches might be applied.

EASY METHOD OF CLEANSING THE MIDDLE EAR OF INFANTS.—Dr. M. F. Coomes (*Louisville Med. News*, February 5, 1876) recommends the following method of using Politzer's air douche on infants: If too young to stand, or unruly, the child should be placed in the arms of a nurse, on its back, inclined at an angle of forty-five degrees. The nozzle of a suitable air-bag is placed in the child's nose. As the surgeon is ready to use the douche a teaspoonful of milk or water is put into the child's mouth, which compels it to swallow. Just at the time the act of deglutition is performed, the air-bag must be forcibly compressed. In this way an infant's ear can be cleansed as rapidly and thoroughly as an adult's.

CAUSE OF ROTATION IN LATERAL CURVATURE OF THE SPINE.—Dr. A. B. Judson (*Medical Record*, April, 1876) explains the rotation of the spinal column peculiar to its lateral curvature, thus: It is caused by the muscular and fibrous structures attached to the spinous processes of the vertebral column, which kept those processes near the median line of the trunk, while the bodies of the vertebra, being devoid of attachments, were moved to one side of the median line. The explanation is based upon the recognition of the fact that the posterior portion of the vertebral column is bound firmly to the walls of the trunk, while the anterior portion is left free to move to the right or left, according to the direction of the curve. From this it is clear that in the treatment of such cases the support of the parts above the curvature should be applied to the posterior portion of the spine.

OBSTETRICS.

EPIDEMIC PUERPERAL FEVER—ITS GENESIS.—Dr. W. T. Lusk (*Amer. Jour. Obstetrics*, Nov., 1875), in a carefully prepared paper, discusses the origin and course of the puerperal fever epidemic at Bellevue Hospital during the early part of 1874. From this discussion he concludes: (1) Puerperal fever may be engendered by the atmosphere alone. This is shown by the experience in September, 1873. Here febrile disturbances were developed among the patients of the ward, which at once subsided on removing them to another locality, though in the new quarters no changes were made either in the doctors, the nurses, nor in the utensils used. This is not an isolated experience, but owes its importance to the fact that the same thing had happened over and over again. The nature of the miasm can only be a matter of conjecture. The closure of the ward for the space of three or four weeks usually restored it to a healthy condition. The poisoned atmosphere invariably was generated in the ward set apart for the newly confined, and as a rule it rarely manifested any special virulence except during the winter months, when ventilation became imperfect. At a time when puerperal fever raged with great intensity, the deposit of diphtheritic membranes, characterized by colonies of micrococci upon all lesions about the genital organs, seems to point to a parasitic origin.

(2) In distinction from the above, there is a form of puerperal fever possessing eminently contagious properties, not primarily derived from a miasm, but capable in time of generating a poisoned atmosphere. In support of this proposition, we find that a patient, at a time when the general health of the ward was good, was suddenly attacked by a fever presenting symptoms of intense severity. This patient died in a few days, and the autopsy revealed no local lesions. From the time of her attack onwards, there was no time when puerperal diseases failed upon the obstetrical service. Removal of the patient from the ward in which she was attacked, a change in the medical staff, and the utmost precaution regarding the use of utensils, were of no avail. Through the agency of the nurses the disease was kept alive and active. After the epidemic had prevailed for a season, it became characterized by the formation of diphtheritic membranes, usually upon the external genitals. At first, prompt cauterization of the affected parts possessed a surprising influence in arresting symptoms that seemed to point to an inevitably fatal result. However, the occurrence of symptoms preceding the completion of labor shows that the poison found other channels of entry into the economy than the lesions resulting from child-birth. At first this miasmatic condition was not sufficient to produce fatal results; subsequently, however, it reached a stage of development in which it alone rapidly produced death. Cauterization of the local lesions then ceased to possess any marked efficacy.

Editorial.

Original Articles, Reports of Medical ocieties, Observations, Correspondence, News, etc., of general interest, are respectfully solicited from every source. Articles should be practical and carefully prepared.

The Editors will not be responsible for statements made over the names of contributors.

REFORM IN MEDICINE—SHALL IT COME FROM THE PROFESSION, OR THE PEOPLE?

Reform is the watchword of the day—in politics, in society, in religion, in finance, and in education, medical or otherwise. In spite of the incongruous elements advocating reform, a certain progress will undoubtedly be made. One of the reforms advocated in medical education is the establishment of a State Examining Board to sift the profession, to cast out the unworthy and ignoble and retain only unselfish, competent men. It is believed that such a political examining body would greatly reduce the number practicing medicine, and hence obviate all evils due to overcrowding. Indeed, it is commonly stated that the overcrowding of the profession is the source of its present assumed degradation. As a sample of the evils which it is claimed would be obviated by a State examining board, we give the following:

Dr. Edgar (*St. Louis Medical Journal*, May, 1875) says: "The sagacity of the profession is to check a rising man, if possible; be sure never to elect him to any prominent position, whereby the public may infer that he shares the confidence of his professional brethren; never compliment him until he has softening of the brain, paralysis, heart disease, consumption or some disease that permanently disqualifies, and which is always mentioned in connection with his name—'A clever fellow, but he is used up.' Thus has the profession lost sympathy with itself."

All this contains much of real truth, but it is truth that applies with equal, if not greater force, to all other professions, trades and walks of life. It is a universal proposition, based upon the universal selfishness of man. In no sense can it be fairly used as the basis of an argument for a State examining board to limit the increase of doctors.

It might be a good thing for government to protect their citizens from the fruits of their inherent selfishness, but we have never seen any evidence that governments were a whit less selfish than the individuals which organized them. We are alive to the fact that this world has in it much of injustice, and that the medical profession belongs to this world. We deprecate all evils, and would rid the world of them as fast as possible. As to practical methods of reform, there has been and is great difference of opinion. Here and now we cannot enter upon a discussion of the methods now most prominent. Of one thing we are convinced: reform must begin in and be carried on by the individual, or class, or profession that needs said reform. All the State laws in the world cannot reform one drunkard, but it is possible for the drunkard to reform himself. No more can State laws reform the medical profession, but it is possible for said profession to organize and reform itself.

It is a law of organic growth, of development and repair, that the process must begin from the centre of life, from the living protoplasmic matter of the particular body or being in question. We believe that the fullest investigation will show that this law applies perfectly to medical men as individuals and as organized in societies. The practical application of all this and vastly more suggested by it, is that the medical profession should stop appealing for help in medical matters to the State or any outside parties, and should so organize and discipline itself as to provide for its own peculiar wants. In this it will be placed on a par with all other professions. Who ever thought, in this age and country, of seeking legislation to protect the clergy from the ravages of quack clergymen, or the lawyers from shysters, etc.? Let each profession stand on its own bottom, and if unable to take care of itself, let it fall. In Michigan, at least, the profession is satisfied that any reliance upon the State for special help and privileges above those given to all citizens of the State, is vicious in principle and fraught with infinite danger to the profession itself.

MEMORANDA.

Sir William R. Wilde, the famous aurist, is dead.

The library of the College of Physicians, of Philadelphia, now amounts to considerably over nineteen thousand volumes.

The legislature of Minnesota has established a law levying a tax of ten dollars on every druggist for the support of the State Inebriate Asylum.

Prof. Steiner, of Prague, died February 15. In this country he is best known by the translation of his excellent manual on "Children's Diseases."

The College of Physicians and Surgeons of New York has discontinued all faculty prizes, Instead, they offer three prizes for general proficiency in examination.

Dr. Joseph Carson, for forty years professor of materia medica in the medical department of the University of Pennsylvania, has at last resigned his position on account of ill health.

We have received the first issue of the *Ohio Medical Journal.* It was born in Columbus, Ohio, June 1, 1876. It contains ninety-six pages, and is published each alternate month at two dollars per annum. It is edited by Dr. J. H. Pooley. The issue before us is well arranged, and contains the usual variety of excellent material.

The Portland School for Medical Instruction states that "no person will hereafter be admitted to the school who does not satisfy the Board of Instructors that he possesses at least a good common school education. A written examination will be held for all who do not present a diploma from college, or certificate from an academy or high school.

The Medical Department of the University of Pennsylvania has been investigating the matter of reform in medical education. It decides that a high preliminary examination and a graded three years' course are excellent things, but they are impractical in said University until sufficient funds have been raised to endow the various professorial chairs.

The Pennsylvania State Medical Society, at its meeting in June, 1876, adopted the following:

Whereas, The Dauphin County Medical Society, from a sense of high professional duty, has endorsed the action of the surgeons and physicians in resigning their positions, in 1873, on the staff of the Harrisburg Hospital, on account of the introduction of homeopathic practice,

Resolved, That this society do commend and approve of that action.

Resolved, That while approving that action we cannot too fully indorse the high-toned professional action which prompted the medical staff to decline to have anything to do with an institution that recognizes any system of practice based upon an exclusive "dogma."

The committee appointed by the Board of Regents of Michigan University to investigate the laboratory deficits, reported at their late meeting, in June. The deficits were almost precisely the same as those reported by former committees. Notwithstanding the fact that both Rose and Douglas were found to have University moneys in their possession, Dr. Rose was dismissed from employ of the Regents, and the executive committee directed to take the steps needed to reimburse the University. On the other hand, Dr. Douglas was retained in position, and notified that he would be held liable for $1,100. Rose is poor and Douglas rich.

The *American Observer* (homeopathic) comments upon the recent meeting of the Michigan State Medical Society as follows: "The evident purpose of the State Society is to break down the medical department of the University if homeopathy is continued there. The resolutions passed are an insult to the University and its faculties, to the Legislature and our people. Regent Rynd is an allopathic physician, but he is a true man, and faithful to his position. The people of Michigan say homeopathy shall be taught in *their* University, and he has shown a determination to execute their will in an honorable manner. Prof. Jones will have something to say about Dr. McLean's attempt to '*strangle*' homeopathy."

The West Virginia *Medical Student*, in an editorial upon the attempt of one Dr. Horace R. Allen & Co. to obtain the passage by congress of "a bill to incorporate the National Surgical Institute of the District of Columbia," concludes as follows: "We know of no place on *terra firma* where such an institution could be more appropriately located than at Ann Arbor, Michigan. There would probably not be the least trouble in obtaining a State charter, and, moreover, if there located, a magnificent opportunity would be afforded for the display of homeopathic surgery, unsupported and unsullied by the dignity of the 'true church.' In it, also, might be founded a chair of spiritualism, which would make the establishment complete."

The following extracts from a series of resolutions are of interest as showing the feelings of the Michigan State Homeopathic Society toward their new school at Ann Arbor. The entire series was passed unanimously at their late meeting, May 17, 1876:

WHEREAS, The recent meeting in Ann Arbor of the State Medical Society was characterized by a spirit of intolerance, egotism and bigotry;

Resolved, That this society return their sincere thanks to the Legislature, Board of Regents, the press and all others who are arrayed against medical bigotry and assumption.

Resolved, That the society assure the Board of Regents that they have our hearty and united support in their efforts to maintain homeopathy in the University of Michigan.

Further, a resolution was offered indorsing the homeopathic department of the University of Michigan, commending it to all persons desiring to study medicine, and pledging the society to use every effort to sustain and encourage the school. The resolution was adopted unanimously. The annual address of the president was largely devoted to congratulating the homeopaths for their success at Michigan University. Evidently these gentlemen do not believe that they are in danger of being extinguished by the labors of their co-workers in the department of medicine and surgery. Further, the homeopathic students voted unanimously resolutions to the effect that they had been handsomely treated at the University, and that they should return this fall.

The Association of American Medical Editors met at Philadelphia June 5th. The president, Dr. A. N. Bell, delivered an elaborate address upon "The Relation of Medical Editors to the Medical Profession of the United States." Its drift may be gathered from its closing sentences: "Our medical colleges must be made to feel that their period of unexampled prosperity under existing regulations shall no longer continue to be a period of peace. And, if I may be permitted, in conclusion, to apply one of the wholesomest axioms of sanitary science to the most important of all subjects which now concerns the medical profession in the United States—the low standard of professional education—my proposition is, from this time forth until it is reformed, to treat it as an intolerable nuisance. By universal assent, *the fittest time for the removal of a nuisance is the very earliest day practicable after its existence has been made known.* Whoever opposes the removal of it on that day will be sure to oppose it, if he dare, on every other day." At the close of the address, a discussion upon the question of reform in medical schools was continued at considerable length. Dr. Parvin offered a resolution expressive of approval of a preliminary examination and three years' graded course, which was adopted. As officers for the ensuing year, Dr. H. C. Wood was elected president, Dr. Byford, vice-president; permanent secretary, Dr. F. H. Davis.

Book Notices.

Any book noticed herein may be had of E. B. Smith & Co., Publishers and Booksellers, Detroit, Mich.

CYCLOPÆDIA OF THE PRACTICE OF MEDICINE—Vol. IV. Diseases of the Respiratory Organs. Edited by Dr. H. Von Ziemssen. Pp. 800. 1876. New York: Wm. Wood & Co.

The general plan and execution of this volume corresponds very perfectly to that pursued in previous volumes, already noticed in these pages. Many of the subjects here discussed have hitherto been in the hands of specialists. Doubtless the study of these, as here presented, by general practitioners will induce them to undertake the treatment of many previously neglected cases. The chapters on the diseases of nose, pharynx and larnyx were prepared by Dr. B. Fraenkel, of Berlin; those on the diseases of the larnygeal mucous membrane by Prof. H. Von Ziemssen; that on croup by Prof. J. Steiner, of Prague; those on the diseases of the trachea and bronchi by Prof. F. Riegel of Wurtzburg; and those on the diseases of the pleura by Dr. O. Frantzel, of Berlin. It is impossible for us to carefully examine each chapter. A few extracts must suffice:

Von Ziemssen makes the unqualified statement that "on the whole, at the present time, there is scarcely any department of medical science of which the physiology and pathology are so well understood or the results of treatment so gratifying as is the case with the larnyx. This is a strong assertion, and yet abundant evidence demonstrates its correctness.

Of the question of the identity of croup and diphtheria, Steiner says: "The attempt to distinguish croup and diphtheria as two entirely distinct diseases has been unsuccessful, both from an anatomic and a chemical standpoint; indeed, there are many good reasons for supposing that these two affections are only varieties and modifications of one and the same process, which, in consequence of special influences and collateral causes as yet imperfectly understood, makes its appearance at one time as croup, at another as diphtheria; now in a sporadic form, now as a widespread epidemic; now as a primary, and now again as a secondary affection." The mortality of croup among the Jews is double that among the Christians. In an experience of more than one hundred thousand cases of disease among children, Steiner has never met with a single recurrence of true croup. All reports of the disease as recurring three or more times are simply fabulous, and can refer only to pseudo-croup, which attacks a child frequently. As to its etiology, we know that the occurrence of croup is favored by certain conditions. Thus it occurs most frequently during *most cold, changeable weather*, and in many cases the attack seems to be immediately due to *exposure to sudden changes* of temperature, or to cutting north and *northeast winds*.

The dyspnœa of croup is the *combined result of several causes acting together, or in succession*. The most important of these is undoubtedly the *mechanical* one, viz., the swelling, relaxation and intense congestion of the mucous membranes of the larnyx on the one hand, and the false membranes and muco-purulent secretion on the other. The other cause of the dyspnœa in croup is *paralysis* of the *laryngeal muscles*. Respecting treatment, he says: "If cold water and emetics fail to improve the condition of the child, if inflammation continue to advance, and symptoms of carbonic acid poisoning occur, which are unrelieved by emetics, but one resource is left—*tracheotomy*. As to the time for performing the operation, he recommends the beginning of the so-called stage of asphyxia.

The chapters on bronchial catarrh are of special interest to residents in our climate. As a whole, this volume is worthy of a place by the side of those preceding it. The publishers have issued it in a style perfectly similar to its predecessors.

A TREATISE ON DISEASES OF THE NERVOUS SYSTEM. By William A. Hammond, M. D. Sixth Edition—rewritten, enlarged and improved. Cloth. Pp. 882. 1876. D. Appleton & Co.

The author's claims respecting the extensive alterations and additions in this volume we have verified by careful examination. These changes have increased the matter of this volume to double that of the previous edition. New chapters have been added on exophthalmic goitre and toxic diseases of the nervous system. Several illustrations have been added. Although not finely executed, they are, as a rule, quite instructive.

There is no doubt that it is the best and most popular book on nervous diseases in the English language.

Any elaborate notice at the present time would be in bad taste.

AN ELEMENTARY TREATISE ON DISEASES OF THE SKIN. By Henry G. Piffard, A. M., M. D. Cloth. Pp. 376. New York and London: Macmillan & Co. 1876. Price, $4.00.

So far as we are aware, this is the first systematic treatise on dermatology written by an American. The author says "that he has endeavored to provide for the student a guide to the study of elementary dermatology, and to afford the practitioners assistance and recognition in the treatment of cutaneous diseases."

The chapter on anatomy of the skin is, in every way, admirable—concisely yet clearly expressing the most recent researches. The beautiful illustrations from Sappey and others greatly enhance its value.

Concerning the origin of the horny layer of the epidermis, Piffard believes that its cells are regenerated independently of the cells beneath it. Cells of the rete always remain such, and do not become horny, and the cells of the horny layer never were cells of the rete.

The physiology of the skin is disposed of in three pages, and is less satisfactory than that on anatomy.

After detailing the three principal systems of classification, viz., the lesional, the natural and the pathological, the author, while admitting the fact that each has its special advantages and defects, gives a decided preference in favor of the natural system, or etiological. Hence he classifies cutaneous affections in five principal groups: (1) Diathetic affections; (2) general non-diathetic affections; (3) reflex affections; (4) local affections; (5) affections of uncertain nature. All familiar with the unsatisfactory state of our knowledge respecting the etiology of disease will at once appreciate the difficulties attending such a classification. Affections very unlike are necessarily placed in the uncertain list.

The statement of the morbid condition attending the rheumides and their cause is given as follows: (1) The blood is surcharged with insufficiently oxidized excrementitious principles less soluble than urea, the substance into which they would be changed if normal action were taking place; (2) the blood is sub-alkaline; (3) the accumulation in the blood of these execreta is due either to deficient action of the kidneys or to an excess of their production; (4) this excess is due either to over-supply of albuminoid blood, the surplus not being thoroughly oxidized, or to a failure on the part of the oxidizing process to fully complete these changes; (5) there are strong reasons for believing that the liver is the organ more particularly at fault in this connection.

The two principal indications from these views are to depurate the blood and to promote the oxidation.

The means for fulfilling their indications are in a general way clearly indicated.

Eczema is discussed at a length proportionate to its relative importance. In its internal treatment he recommends the rational plan—which involves the employment of cathartics, diuretics, alkalies, oxidants and hepatic stimulants, either one or all, as the peculiar circumstances surrounding each one may seem to indicate. As to the empirical treatment by arsenic in a certain proportion of cases, it does harm; in other cases it does neither harm nor good; while in others its employment is followed by decided results.

In dealing with the variety of subjects, the author sometimes sacrifices definiteness for brevity. The photo-micrographs are a feature peculiar to this work. We cannot see that they are equal to drawings for the purposes of teaching. The paper, type and presswork are in every respect superior.

As a whole, we commend it to the careful attention of those who are beginning the study of skin diseases.

FILTH-DISEASES AND THEIR PREVENTION. By John Simon, M. D. Cloth. Pp. 100. 1876. Boston: James Campbell. Printed under the direction of the Massachusetts State Board.

This is a book for the masses—clear, pointed and concise, full of truth which, if heeded, would render the state infinitely richer and individuals more prosperous. Physicians, too, would be profited by reading it and recommending it to such of their patients as would carefully study it. That filth is disease we cannot too firmly believe or too frequently proclaim.

AN INTRODUCTION TO PATHOLOGY AND MORBID ANATOMY. By F. H. Green, M. D., London. Second American from the third revised and enlarged English edition. Cloth. Pp. 300. Philadelphia: H. C. Lea.

That this book was needed is evidenced by its successive editions. The recent revision was carefully performed, so as to place the book in harmony with the latest demonstrations. We unhesitatingly commend it to those students and practitioners who lack the time needed to study the larger and more elaborate works.

For sale by J. M. Arnold & Co., Detroit.

MICRO-PHOTOGRAPHS IN HISTOLOGY—NORMAL AND PATHOLOGICAL. By Carl Seiler, M. D., J. G. Hunt, M. D. and J. G. Richardson, M. D. Nos. 1 and 2. 1876.

In a late issue we noticed the prospectus of this work. A careful examination of the numbers before us more than confirms our favorable notices.

No. 2 contains photographs of elastic connective tissues, schirrhus of mammary gland, non-elastic connective tissues and connective tissue corpuscles.

No. 1 contains section of skin, epithelioma of lower lip, pavement epithelium and endothelium. The descriptive text is clear, and the whole combined is elegant.

Every physician should subscribe for this new periodical.

DETROIT
REVIEW OF MEDICINE
AND PHARMACY.

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Original Communications.

NINE CASES OF VESICAL CALCULUS.

Read before Detroit Academy of Medicine. By Theodore A. McGraw, M. D.

It is well known that Michigan furnishes very few cases of vesical calculus. Why this should be is an interesting question whose answer might yield valuable hints for the prophylactic treatment of the disease, in neighborhoods where it is prevalent.

As a contribution to the history of stone in the bladder, as found in Michigan, I offer the following short account of the cases which have occurred in my own practice during the last three years:

No. 1. On December 28, 1872, I was called by Dr. DeGuise, of this city, to see a French school teacher by the name of Guilbandt, of about fifty years of age. He had but recently come from Montreal, and had been under the doctor's care but a short time. For seven years he had suffered an intermittent pain at the end of the penis and in the bladder. He had passed blood and pus in the urine, and, in fact, had suffered all the symptoms of stone. For some reason, his medical attendants had failed to recognize the nature of the malady, and when Dr. DeGuise was first called to see him, and made the correct diagnosis, he had already become nearly exhausted by the constant agony, and the irritation of the bladder, kidneys, and rectum. What may have obscured the diagnosis in the earlier period of the disease was the fact that the pain was, at times, intermittent in character, coming at one period regularly at four o'clock in the afternoon, and disappearing after some hours of continuance. It was on this account mistaken, by at least one practitioner, for a malarial neuralgia. After waiting for several days in the vain hope that the patient might rally, and be in a more favorable condition for an operation, the doctor called me in consultation. As a last resort, we determined to give him the relief afforded by lithotomy. I accordingly operated by the lateral method, but was obliged to cut slightly the right lobe of the prostate before I could extract the large calculus of 589 grains weight, with which the bladder was half filled. The patient did not survive the shock of the operation, but died some twelve hours afterwards. A *post-mortem* revealed no local causes for the production of stone, and no enlargement of the prostate, but the effects of the long continuance of the calculus in the bladder could be seen in the thickened condition of its coats, and in the altered structure of the kidneys. The stone had a nucleus of uric acid, but the bulk of it consisted of the fusible phosphates, with a very small mixture of oxalate of lime.

No. 2. Nearly a year afterwards, I was called to Fentonville to operate upon a patient of Dr. Sue's, a farmer from Brighton, who had brought his stone with him, however, from Ohio. He had been previously cut for stone by the median method, and was now suffering from a recurrence of the disorder. The case was one well adapted for lithotrity, but the patient refused to come to Detroit, and I therefore cut him by the lateral method. The stone was soft and small, weighing but forty-one grains. The centre consisted of the urate of soda, the outside of the fusible phosphates.

No. 3. The next case was also an imported one, occurring in the person of a middle-aged negro, who had lately come from Virginia. His symptoms dated back a great many years. He entered Harper hospital, May 4, 1874, and the calculus was immediately discovered. I shortly afterwards performed lithotrity, crushing a stone measuring six-eighths of an inch in its long diameter. The bladder was loaded with mucus, and the fragments came away scantily and with difficulty. The operation was performed again and again, but the patient was very irritable and suffered greatly from any manipulation, even the passing of a catheter. He finally refused to submit again to lithotrity, and I cut by the lateral method. I found the stone in fragments in the bladder and removed it. It weighed sixty-five grains, and consisted of triple phosphates mixed with the fusible phosphates.

No. 4. On Feb. 21, 1875, a German came to the college clinic with a calculus whose history extended over twenty years. The symptoms began in Germany and have never subsided, but had not been so severe as to prevent him from working, until within a few months. His disease had been mistaken for gonorrhœa and other troubles. Lithotrity was thrice performed, and his symptoms disappeared with the passage of sixty-one grains of stone of mixed character. It contained oxalate and phosphate of lime. He has since been quite well. In this case there was a consistent and uninterrupted history of stone for a period of twenty years; but, probably, on account of the small size of the calculus, the symptoms had been comparatively mild in degree.

No. 5. On the evening of March 10, 1875, I was sent for in haste to see a gentleman fifty-eight years of age. He had been a partial paralytic for years; was then scarcely able to stand, and had suffered from atony of the bladder. His prostate was enlarged, and he could pass water only after great straining, and often only by the aid of a catheter. His present trouble was caused by the lodgment of two calculi in the fossa navicularis of urethra. I extracted them with difficulty. The next day I was sent for again to extract another from the same place. They were of uric acid and weighed, together, forty-three grains. The largest weighed twenty-five grains, and could not have passed had the urethra been smaller.

No. 6. On January 7, 1876, a man was sent to me by Dr. Jas. Brown, of this city. He was a sailor, and had had symptoms of stone for three or four years. He had been treated by several physicians for gonorrhœa, and no suspicion had been entertained of the true cause of the muco-purulent urethral discharge until he fell into the hands of Dr. Brown. I found a small calculus, and easily disposed of it by crushing. It weighed thirty grains and was composed of layers of phosphate, carbonate and oxalate of lime and uric acid. The patient had been of a roving disposition, his business as a sailor leading him in many directions, and the place of origin of the calculus was therefore uncertain.

No. 7. During the winter of 1875–6, a strong laboring man, of some fifty years of age, brought me a small calculus of two or three grains' weight, which had passed with his urine. He had once before passed a small uric acid stone, but was now free from urinary difficulties. He would submit to no examination, but may have had some prostatic enlargement.

No. 8. On April 5th, 1876, I was called in consultation by Dr. Stone, of Metamora, Mich. The patient was a man of over sixty years, whose calculous symptoms had supervened upon those of prostatic enlargement. I examined him with a lithotrite and found a stone measuring six-eighths of an inch in diameter. The patient was not prepared for operative procedures, and I have not heard the result of the case. I recommended lithotrity.

No. 9. On April 16th, I operated upon a case which was brought to St. Mary's Hospital by Dr. Bradley, of this city. The patient was a colored man who had lived many years in the city and whose calculus was undoubtedly of Detroit origin. He had suffered for more than two years, and was, at the time I saw him, in constant agony. He could neither sit, stand nor lie in comfort, and for the most part sat in his hovel, crouching in a corner. His great age, for he was seventy-nine years old, as nearly as he could tell, and the calcareous degeneration of his arteries was against an operation. The unceasing misery in which his life was passed seemed, however, to justify an attempt at relief by operative procedures. Lithotrity was not deemed advisable on account of the number and size of the stones. I therefore performed the lateral operation and removed five calculi, varying in weight from four to one hundred and ten grains. In all they weighed three hundred grains. The patient had an enlarged prostate, behind which the bladder formed a pouch. He seemed to do well at first and ceased to suffer the previous atrocious pains, but, after twelve days, died of exhaustion. The stones were composed of the oxalate and carbonate of lime, uric acid and the earthy phosphates. The nuclei were principally of oxalate of lime.

If we analyze these nine cases, we will see that only four of them were of Michigan origin. One of these (No. 7) did not submit to an examination, but was at an age when prostatic enlargements are common. Of the other three, Nos. 8 and 9 undoubtedly resulted from prostatic enlargement, while No. 5 was a paralytic, whose bladder had not for years performed its function of evacuating the urine in a proper manner.

In other words, the cases which originated in Michigan were all, with one doubtful exception, the result of local causes which affected the bladder in a way which prevented it from duly and properly discharging its contents. Climatic and endemic causes cannot be said to have originated one of the four cases. In no one of the other five cases, on the contrary, could any local cause for stone be discovered. No one of them suffered from prostatic enlargement, and but one showed symptoms of vesical paralysis. In this one case, No. 6 of the series, I found a remarkable tolerance of water injections when operating on him by lithotrity. The six and eight ounces of water injected remained when the finger was removed from the end of the catheter, the bladder apparently lacking the tonicity to eject it. That this lack of tone was due to the presence of the calculus, was proved by the fact of its disappearance when the stone was removed. During the last examinations, which I made with the lithorite, I found it difficult to fill the bladder with water, the ejecting force was manifested with so much vigor and promptitude.

It is not possible to generalize from so few cases, and yet, drawing conclusions from my own experience and from that of other medical men in the State who have spoken with me on the subject, I will venture to say of the cases of stone to be met with in Michigan that they will be found, when indigenous to the State, to have resulted for the most part from diseases which have either obstructed the flow of urine or have paralyzed the bladder. This is in marked contrast with those cases which have been imported from abroad. The contrast becomes still more marked when we call to mind the fact that while, in a so-called stone region, the cases of calculus in children and youths below the age of twenty outnumber all the others in Michigan, children are rarely so affected.

In short, whatever may be the cause, we seem in this locality to be exempt from those morbid conditions, which, in Kentucky, Ohio, Virginia, and other States, cause the formation of calculus in otherwise healthy subjects.

Why this should be so, I will reserve for further investigation and another paper.

ADVANCEMENT OF THE STANDARD OF EDUCATION IN THE MEDICAL PROFESSION.—HOW CAN IT BE ACCOMPLISHED?

Paper read before the Lansing City Medical Society, June 2, 1876. By Henry B. Baker, M. D.

Ever since the first that we can remember in our profession, the great theme which has come up at nearly all important meetings of our leaders, has been the subject that I have selected as a title to what I wish to communicate to-night. I do not propose, however, to follow the same old beaten track, but to take a "new departure," and endeavor to show that it is by a "flank movement" that we may hope to be more successful in accomplishing what has seemed to be the aim of those great and good men in our profession, who, from time to time, have labored earnestly and nobly for the advancement of our profession, which, to them, has meant a more intelligent and successful service of our fellow beings, whose sufferings it is for the physician to endeavor to prevent or alleviate. Now, this is a subject in which two classes of people have an interest—the honest intelligent physicians in one class, and all the rest of the people, who at some period in their lives should employ them, in the other; and as is usual where two classes are interested, each of these same two classes has something to say or do, which decides whether anything effectual shall be done or not done. It is somewhat strange, but it is nevertheless true, that by those venerated leaders of ours, this point seems to have been overlooked or disregarded. They have seemingly never doubted that they could have it all their own way, and they have not thought it worth while to consult the other party interested. So far as I know, the subject has never been brought before the people at all, but whenever leading members of our profession have met in convention, the subject has been discussed, resolutions have been passed, and work enough done to have accomplished twice over all that has been attempted, if only the result depended altogether upon the profession.

It may be well to endeavor to explain how it is that it does not depend entirely upon the profession. It is plainly a correct proposition that the physicians, as a class, are supported by the people for the services which the physicians are able to perform. It is also plain that the best support will be given to that class of physicians who best suit the people. Now, it is a familiar fact that those persons whose lines of thought run in similar channels find most agreeable companionship, and that those whose views are widely separated have little in common with each other. Take as an example the native doctors in Central Africa, who are mentioned in the London *Public Health*, May 19, 1876, as being witnessed by Lieut. Cameron at one of their "congresses," going about "each with a row of iron bells hung over his loins, which he kept perpetually ringing to attract patients." Now, although these doctors would not suit many of our citizens, it is not probable that the best educated physicians among us could get a living by practicing in Central Africa in opposition to those same doctors who attract the natives mainly by their bell ringing. It is much the same, although in a less degree, among the inhabitants of this country. The fashion here at present is slightly different, the attraction usually being displayed in hand-bills or newspapers, with pictures of horrible diseases and deformities, certificates of remarkable cures, statements that the world-renowned doctor will be at a certain place for a few days only, etc., etc. The newspapers, and even the religious papers, are full of these degrading relics of barbarism, little above the bell-ringing natives of Central Africa. It is from these same papers that many people get a large part of their education on medical subjects. Is it surprising that the noblest efforts of the medical profession for the advancement of its standards have not met with better success? Where have the efforts been made? We must say they have not extended to the newspapers, they have been confined to the profession itself; and it is not the profession but the supporters of bell-ringing doctors to whom repentance should be preached.

Although the most highly cultured may understand and be interested in studying the less cultured, it is utterly impossible for the less cultured to apprehend or appreciate the ideas which are common to those persons whose training has been broader, deeper, more general and more specific. It is as impossible as that the lesser object in size should include the greater. It is possible for persons of little culture to realize that other persons whom they meet have ideas to which they cannot attain, but as to judging correctly of the relative value of the culture of those who are thus beyond them, it is a more difficult operation. In some cases this is possible, approximately at least, through a comparison of the results of their labor; but where, as between practitioners of medicine, the data are lacking for any very satisfactory comparison of this nature, the case is different. All intelligent physicians know that to judge of a physician's skill and ability to properly treat persons suffering from disease, to guide them toward a natural healthy condition, and to compare the ability of one physician with that of another, simply by the relative proportion of deaths to cases in the practice of these physicians, is not good reasoning, because too many factors are left out which are essential to a proper comparison. Some of these factors may be briefly indicated. One of the practitioners may be called to attend more old people, or more children, among whom the death rate is much greater than among those in middle life; one may be called more frequently in cases were little danger is apprehended, while one in whom the people have greater confidence has a greater proportion of serious cases.

I hope I have sufficiently indicated the basis for my belief that the people determine what class of physicians they will support; that it is absurd to expect those who have no conception of the essentials in the special culture of experts to judge accurately or well of their qualifications, and that as a rule the physicians chosen are those whose views most nearly correspond with those of the people who employ them.

It seems to follow that whenever a physician goes much beyond the average, he becomes less popular with the masses; he is not so well supported. He may find a place as a teacher in the special study in which he is most proficient. If he fails to secure such a position, he drags along with what little support he gets, or leaves the profession for some more profitable or satisfactory labor. It also follows that there can be no great progress of the profession except the people consent, and that so long as they can secure persons of that comparatively low culture which they can appreciate, there is no probability of raising the standard of qualifications of physicians.

Our profession has labored long and hard to advance the standard of medical education, and the qualifications of its members. Advance has been made, but not to any such extent as it ought, to follow such great efforts. Only so much progress has been made as the slowly progressing knowledge of the masses has permitted. The only possible way in which the standard of medical education and the qualifications of practitioners can be advanced, is through such education of the people as will enable them to appreciate the need and the possibility of such progress.

If it be granted that the forgoing propositions are true—and I do not see how they can be doubted—is it not clearly the duty of the profession to take greater care not only that their light be not hid "under a bushel," but that in all proper and practicable ways the knowledge gained by the physician, and which consists so largely of that which is most valuable to the people, because it teaches them how to live healthful and natural lives, shall be imparted to the people? This, in my opinion, is the solution of the great problem of how to advance the standard of medical education. It is a movement which requires that some shall advance, and that others shall support them in so doing. The conditions are such that unless the support keeps within easy reach, no progress can be made. The profession is now so far in advance of the people, that further progress is difficult, if not absolutely impossible. There is great need of that kind of missionary work among the people that shall bring them up nearer, and it is important that the blind shall not be permitted to lead the blind. I trust that a sufficient number of those in our profession who are well qualified for such work, will give vigorous thought and action to this subject.

RUPTURE OF THE UTERUS.

By Dr. D. C. Holly, Vernon, Mich.

MEDICAL literature of the present day not unfrequently brings to our notice accounts of this fearful accident occurring in obstetrical practice; and viewing the matter in cosmopolitan light, it certainly occurs very frequently.

We do not propose in this paper to advocate any theory in regard to it, or to discuss and combat any of the views of late German writers in regard to a certain want of proportion, or rather a marked disproportion existing between the muscular development of the body of the uterus and an abnormally thin cervix. The only case of the kind which ever came within the scope of our own personal knowledge needed no fine spun theory to show its "fons et origo" by any manner of means, inasmuch as it was fully shown at the post-mortem and by the evidence at an examination by a coroner's inquest, that it was the bail of an old swill-pail (such as may be found in most any Irish shanty) in the hands of one of the most ignorant and notorious quacks that ever set foot in the valley of the Shiawassee, that accomplished the bloody and fatal deed.

A history of the case somewhat in detail, as best we may gather it from memory after the lapse of some twenty years, will constitute the balance of this short article.

About twenty-two years ago the present winter, when the road-bed of the D. & M. Railway was being constructed by gangs of Irish laborers, one of the women connected with one of the boarding shanties on the line of the road near the then village of Corunna, fell in labor, no strange event in the life of the wife of an

Irish laborer, it is true, but she was in anguish, and in her sorrow aid was sought at the hands of a grossly ignorant quack.

But the doctor loved whisky and the Irish were not averse to it, and so, for a time, all things went on swimmingly.

After a while it was discovered by the patient at least, that she was making no progress towards delivery and the doctor was loudly importuned for succor.

And so the doctor, divesting himself of coat, hat, etc., squared himself for action, but like very many of this class, the nearer he got ready the less he knew what to do, but finally, after a long and fussy examination, came to the conclusion that inasmuch as he could get his finger into the child's mouth, all that would be necessary under the circumstances, would be to hook his finger into the same and then "pull," and all would be forthcoming instanter! but, alas, for human hopes, his digit grew weary, but baby wouldn't come. Here was a dilemma. A consultation held with the Irish help in the shanty, the patient's friends, somebody suggested a hook as the proper instrument with which to render aid under like circumstances.

No sooner said than done; the doctor called for a pail and the swill-pail came forth from its resting place in the pantry; its bail taken off, the hammer called for, the axe stuck into a log as an anvil pro tem., the doctor proceeded to construct his obstetrical hook, and gathering wisdom from the past, and doubtless foiled, as he supposed, by the bluntness of his own finger, resolved not only to have a hook, but to have it sharp, he proceeded to sharpen it in the line of its curve as adapted to the ears of the pail, and now he would show them, he remarked, how to "get a little Irishman out of his hole."

He proceeded to operate; he would introduce his sharp hook into the vagina of the poor woman, and in spite of her screams that he was killing her, pull on something to which it would fasten until the bloody instrument would slip and come forth. This was repeated again and again. The instrument would commonly fasten itself upon some portion of the os or other soft parts of the mother, at other times, as afterwards shown by the post mortem, it would fasten itself upon the arch of the pubis. At last, persevering in spite of the cries and screams of the murdered woman, he succeeded in getting his unique obstetrical instrument into the mouth of the child, and then by dint of direful efforts at extraction, he was finally rewarded by receiving in his hands the inferior maxilla of the unfortunate child in utero. But at last there came a finale to this horrible transaction. The uterus lacerated beyond all endurance, in one terrible throe ruptured itself, the laceration extending from the cervix to near the fundus, and the child escaped into the abdominal cavity; speedy collapse ensued, and both mother and child were beyond the reach of such human fiends as quack doctors.

The quack explained matters satisfactorily to the friends of patient, by saying the pains instead of going down as they ought, went to her heart and killed her.

As a matter of course the affair soon became noised abroad through the village, and no little excitement ensued in consequence.

A coroner's inquest was called and all the physicians residing in Corunna, Owosso and Vernon, were subpœnaed to attend and examine the case. And inasmuch as we, living farther away from the scene of the murder (in this paper we shall try and call things by their right name), consequently supposed to be less excited and prejudiced than others more locally situated, were requested by the physicians of the place (Corunna) to perform the post-mortem, which we accordingly did.

A section of the abdominal parietes came directly upon the body of the child, wholly escaped into the abdominal cavity, child, cord, membranes, placenta and all. The uterus, with a rent extending from cervix to fundus, was quite firmly contracted. Very little blood and but little serous fluid was found in the abdominal cavity; death came quite too rapidly for anything of the kind to occur. Sawing through the ossa pubis and the rami close to body of the ischium, we removed uterus and vagina entire in their contiguity, so far as the mutilated condition of the parts would permit, and proceeded to make a minute and careful examination of the same. It is perhaps needless to reiterate that at every step of the operation we came upon the work of the quack and his murderous hook.

The cervix was gashed and cut in a fearful manner in many places, the gashes extending nearly through its substance so as to wound the peritoneum, and in many places the bony substance of the pubic arch itself showed very distinctly the indentations of the pail handle.

We shudder even now after the lapse of years, as from time to time we think over the details of this awful tragedy.

So far as the crime and its punishment is concerned, suffice it to say, that after repeated adjournments the case was finally disposed of in the Circuit Court by a jury finding the quack guilty of manslaughter through ignorance and carelessness.

The judge mulcted him in the sum of $500 and ten days in the county jail.

The fine was paid by subscription among the citizens of Corunna and vicinity.

It is even said by tradition that while incarcerated in jail he passed out through the diamond windows more medicine and carried on a more flourishing office business than all the other physicians of Corunna, including your humble narrator, all put together. No wonder the great Scotch essayist Carlyle said, "The world contains ten hundred millions of people, mostly fools."

We have written the details of the case, not because it contains any points of scientific interest in particular, but to the mind of the thoughtful physician, to every friend of humanity, it conveys this thoughtful lesson, the necessity of such legislative enactments as will protect human life from such fatal outrages as the above, and which are being constantly repeated by medical pretenders throughout the land.

THROMBUS VAGINÆ ET VULVÆ.

By Abe. M. Stephenson, M. D., Adrian, Mich.

Mrs. B., aged 32, German. Has always been healthy. No miscarriages. Has given birth to four children—all living—making good recoveries each time. Feeling as well as usual, she churned on the seventh of June, 1876. In the night of the eighth felt slight pains, but they soon passed away. Was able to get breakfast. A midwife arrived at 8½ A. M.; labor set in at 10 A. M., and progressed gradually until a few minutes before 12 (noon), when the midwife first noticed that the left labium majus was enlarging; from this time to 12 o'clock it continued increasing until it equaled the size of a child's head, when, a severe pain coming on, it burst with a "cracking sound," and profuse hemorrhage took place. Dr. Joseph Tripp was immediately summoned, who, arriving at 7½ P. M., found patient exsanguinated, pulseless at the wrist and gasping for breath. Stimulants were given, which resulted in restoration of circulation in extremities. An examination per vaginam discovered walls distended with extravasated blood to such an extent that with difficulty the hand was introduced; head was found in the excavation, presenting in the R. O. A. position. The pains having ceased, Dr. T. attempted instrumental delivery, but, owing to the patient's tossing about and insufficient help, was unable to accomplish the design. I was then sent for, arriving at 3½ P. M. Forceps delivery was accomplished five minutes after arrival; child was still-born; all attempts to restore animation were fruitless. Placenta came away in five minutes; uterus contracted firm; no hemorrhage afterward took place. After delivery, respiration 36; pulse 120, small and compressible. Stimulants were freely given, but patient did not rally and died a little before five P. M.

The cause of the thrombus in the above case is doubtful. As far as could be ascertained, the parts had received no injury either before or during labor. It could not be due to any emotional cause, as the woman was one of those phlegmatic Germans whom nothing excites; moreover, there had nothing happened to cause excitement. No varicose condition existed before labor set in. As far as could be discovered, no direct agency was apparent, if we except the pressure of the head and severity of the pains preventing the return of venous blood. Considering the rarity of the lesion, I have taken the liberty of reporting the above case. "Deneux, in fourteen years' practice, met with but three cases; and the late Baron Dubois saw but three in fourteen thousand labors."

Original Translations.

CYSTICEROUS CELLULOSÆ.

Translations from the Klinische Monatsblatter fur Augenheilkunde for May, and Annales d'Oculistique for March and April. By Eugene Smith, M. D., Detroit.

The interesting nature of the following cases and their great rarity in this country, must be my apology—if such is necessary—for preparing them for the Review:

Case 1.—By Dr. Waldhauer in Klinische Monatsblätter.

A. J., aged 21 years, came to the hospital September 22, 1870. The right eye is pressed out of the orbit and hangs over the under lid. The eye is covered with a scab. When the scab is removed the cornea can scarcely be recognized. The conjunctiva is covered with shallow ulcers and forms a fold extending from the edge of the upper lid, covering a tumor which is nearly as large as the eyeball. The tumor is elastic, fluctuates and is not painful on pressure. It is not regular in form, having a fold in which fluctuation is distinctly recognized.

A thorough history is impossible, the patient being simple. For four years the eye has been growing blind and by degrees pressed farther out of the orbit, the right side of the head being painful. Nothing peculiar in his manner of living can be found.

The expression of countenance is one of suffering. The pain, at first, came in paroxysms, but for the past year has been constant and terrible.

The diagnosis was at once made of echinococcus cyst., and its removal, together with the eyeball, determined upon. The operation was performed the following day under chloroform. The outer angle of the lids was split as far as the orbit, and preserving as much as possible of the healthy conjunctiva, the incision was carried over and under the cornea as far as the caruncula, thus preparing the tumor and the eyeball for removal. The globe appears to be covered with a thick and strong fatty infiltration; over the tumor this is thinner.

It was my intention to remove the tumor uninjured, but with the finger and scissors crowded between the walls of the orbit and the elastic tumor, it was very troublesome. Deep in the orbit the sac, for the most part, was felt to be much thinner, but again harder and stronger like a cord. Even with the precaution taken, while separating with the finger it tore, and the contents gushed out, a mass of echinococcus cysts from the size of a hazelnut down to that of a lentil. Some of the larger ones are empty, whether so before the operation I cannot say. The contents of the orbit could now be removed without further trouble. Near the sac we find considerable hypertrophied cellular tissue. The lachrymal gland is not much changed. The after-bleeding was so important that I applied a tampon.

The first day of the suppuration it had a cadaverous smell; some time later it was more abundant and had a phosphorus-like odor. An abscess formed over the lid which was opened; the pus was normal.

In two months the orbit was filled with healthy graulations and the remains of the conjunctiva helped much towards forming a cicatrix.

Unfortunately the whole preparation was carelessly thrown away after the operation.

Case 2.—*By De Wecker in Annales d'Oculistique, March and April,* 1876.

J. M. B., aged 41 years, captain of cuirasseurs at Versailles, came to the clinique August 20, 1875, with a little tumor situated towards the external part of the upper lid, the development of which was causing uneasiness. The patient says it is about two and a half years since he first perceived a small lenticular enlargement occupying the middle of the upper lid. At first it was but slightly movable and it slowly descended to its present position near the angle of the eye. Six months since it began to grow and became quite movable.

At present the tumor is spherical and has a diameter of five or six millimeters, and is covered with healthy skin which glides freely over it.

Ablation having been decided upon, the operation was made August 24, 1875. The skin was incised and the little tumor dissected out carefully without injury to the sac. Two sutures were put in the wound. The microscope showed, as De Wecker had already announced while operating, that the tumor was a cyst containing a cysticercus. The micriscopic examination made by M. Poncet, showed an echinococcus lodged in a thick double capsule. The patient was carefully interrogated regarding his manner of living, but had never eaten of uncooked meat or suffered from tenia.

Case 3.—*By same. Cysticercus of Vitreous.*

Mr. Roussel, aged 22 years, presented himself at the clinique the beginning of December, 1875. He complained of diminution of sight of the left eye, which had been progressing for six months. He was a native of Nancy and had excellent health. He attributed the weakness of vision ($S=\frac{1}{80}$) to excessive work.

Ophthalmoscopic examination showed a well pronounced opacity of the vitreous humor, especially the posterior portion; outwards in the vicinity of the macula lutea a yellowish surface about twice the size of the papilla very strongly reflected the light.

Between the papilla and this brilliant surface we can see, with some difficulty, an extended detachment of the retina. Inwards and downwards is seen a bluish, transparent vesicle, which is easily recognized as a cysticercus. The head is but occasionally seen, and is directed downward and backward. The cysticercus is but slightly displaced by movements of the eye or head. Taking into consideration the free position of the animal, I thought I might be able to pierce the vesicle by a Graefe's knife. Illuminating the fundus of the eye with a laryngoscope attached to the forehead, I entered the knife on the side opposite the cysticercus, about one centimeter (4 lines) upwards and outwards from the cornea, having previously pulled the eye strongly downwards and inwards with the fixation process. I could thus very easily observe the instrument in the eye and saw the very rapid displacement of the vesicle upwards and inwards before the point of the knife. Convinced that I was, without result, touching the animal with the point of the knife, I stopped, also, because I feared an escape of fluid vitreous.

The irritation following this attempt was insignificant, and eight days subsequently the eye presented no redness.

Ophthalmoscopic examination showed the following changes: The vesicle was more movable, changing its position with each movement of the eye or head; the head and neck of the animal were only occasionally seen, but were more strongly extended, the head being in rapid motion; the vesicle, on the contrary, seeming absolutely immovable, struck me as being considerably more contracted than at first. I hoped this condition of the animal, so different from that at first observed, might be an indication of approaching death, but I soon became convinced by some filiform opacities that the irritation of the vitreous humor augmented rapidly, and that the animal became fixed upwards and inwards at the zonula.

The detachment of the retina becoming greater, I foresaw the loss of all perception of light within a short time. In order to save the form of the eye, upon which we could not count if the cysticercus remained much longer, I decided to extract the animal. With this aim in view, I uncovered (dissecting back the conjunctiva) the sclerotic above the vesicle, between the insertions of the superior and internal recti muscles, and with a Graefe's knife I made an incision six millimetres in extent, which was enlarged with the scissors, the deeper portion of the sclera having been imperfectly divided by the knife. I expected to see, after the enlargement of the wound, the escape of a part of the fluid vitreous and at the same time the cysticercus, but it did not happen, there appeared only some slightly diseased masses of vitreous, and I was obliged to extract the animal with forceps. The instrument was introduced several times without result, assuring myself each time of the position of the animal, which, as I became certain of it, was displaced backwards, outwards and upwards. The loss of vitreous was so insignificant as to surprise the *confreres* who assisted at the operation. The eye did not collapse, and after placing a fine suture superficially in sclerotica, I convinced myself by ophthalmoscopic examination that only the inferior and external part of the retina was detached and pushed forward.

The course of the healing was equally surprising, there being neither pain or conjunctival secretion; a slight swelling of the inner third of the superior lid could hardly be noticed. The eye was but slightly red. The suture was allowed to remain till the tenth day. The compress bandage was worn till the fourteenth day, and the patient kept eight days on his back in bed. I hoped thus to obtain a partial reättachment of the retina. The vision was but slightly benefited, the patient being only able on quitting the clinique fourteen days after the operation, to distinguish fingers downwards and outwards. Externally, a slight swelling of the conjunctiva and of the cicatrix of the sclera could be barely seen.

The ophthalmoscope shows the detachment of the retina already mentioned and a thick cicatricial cord occupying the direction in which the forceps were passed. Some weeks after the eye presented a normal appearance externally.

ANEURISM OF THE PULMONARY ARTERY AND RHEUMATIC INFLAMMATION OF ITS VALVES. (*By Prof. Lebert-Vevey.*)

Translated from "Berliner Klinische Wochenschrift" by Rob. Zimdars, M. D.

Bertha Vogler, washerwoman, 37 years old, descends from sound parents, and was, as she says, always well until seven months ago, except some slight children's diseases, which she had had in her childhood. At the present time, she was taken with severe pains in her joints, especially the hands, with swelling of the limbs and fever; this trouble was augmented by considerable dyspnœa. The pains had left her about three weeks afterwards, while the swelling of the joints and the dyspnœa remained up to her entrance into the hospital. At the first examination, we find a very pale-looking patient, the legs very œdematous, the abdomen swollen and markedly fluctuating. The apex beat of the heart extends outside from the mamillary line in the fourth intercostal space. The veins of the neck are extended and undulating. The eyeballs project considerably, the pupils are small but normal. The pulsation in the carotids is jerking in character, also that of the radial artery.

The percussion sound is normal in the supra-clavicular region, but there is a slight dullness in the first and second intercostal space of the left side, extending three ctm. (1 inch) beyond the median line; lower down, this dullness unites with that over the area of the heart. The latter organ extends from the above mentioned place of the apex beat to the border of the liver, and about six ctm. to the right of the median line. We notice in the dull places between the first and third ribs a marked, although not very intense, pulsation, also felt on palpation, accompanied by a systolic and diastolic fremitus; between this and the point of the heart pulsation exists a non-pulsating part of the thorax.

Auscultation reveals vesicular murmur, here and there mixed with sibilant and sonorous sounds. Over the apex beat of the heart there are heard two sounds and a systolic murmur; at the inner part of the second intercostal space two sounds and a systolic and diastolic murmur. We hear a soft sound in the smaller arteries, for instance the radialis, this sound becomes a murmur by stronger pressure with the stethoscope.

The sygmographic curve shows an extraordinary influence of the respiration upon it. Posteriorly the percussion and auscultation sounds are normal.

The œdema of the extremities is considerable, the tongue slightly coated and moist, stools loose. The urine showed a sp. gr. of 1020; had acid reaction and contained much albumen, blood and cylinders.

The patient was very weak, coughed much and complained of pains in the back as well as in the epigastrium. Dyspœna was still considerable, the pulse 96 and respiration 28. The treatment consisted especially in restorative diet and infusion of digitalis.

In the following days our patient looks very much exhausted, is cyanotic, has constant dyspnœa and is able to breathe only in the half-sitting position and in greatest rest; her body is covered with sticky sweat, the appetite is lacking and the bowels are costive. Notwithstanding that she sleeps well at night, she is somnolent. The urine, opaque and red-yellow, contains some red blood corpuscles, white and transparent cylinders and much albumen. Her pulse very weak, goes up to 120 and even 132, respiration not over 28, the dry cough is very troublesome, the œdema increases, our patient becomes weaker and weaker, delirium alternates with sopor and she dies the 4th of March, in the morning. The temperature was, during her stay in the hospital, about 103° in the evening and 101½° in the morning. During the last days there was a decrease on account of rapid collapse.

Post-mortem Examination 28 hours after Death.

Middle sized cadaver, pretty strongly built; marked œdema of upper and lower extremities; rigor mortis not yet relaxed.

On opening the skull, we found the dura mater opaque, but easy to separate from the pia mater. On the left side, corresponding to the whole convexity, there is a red bloody hue and some very small clots. The abdominal cavity contains some light yellow fluid. The pericardium also contains a considerable quantity of a clear yellow fluid. The pulmonary artery, much enlarged, is nearly spherical in form. The right heart is much enlarged. The pulmonary valves have changed their appearance; there are two greater valves and a smaller one between the anterior and posterior. The left sides of these valves show *a multitude of irregular, yellow, rough growths;* some of them are also seen on the other side. Attached to the smaller valve, by means of a peduncle, is a smooth, firm, fibrinous clot, hard and with a rough surface; in the interior of the endocardium and pulmonary artery are similar growths, corresponding to the height of the above mentioned fibrinous clot. The pulmonary artery has at its origin a circumference of 11 ctm.

The left ventricle is also much enlarged, the circumference of the aorta is 7 ctm. Small wart-like fibrinous growths are seen at the nodules aurantii of the valves. The margin of the mitral valve is also somewhat thickened, and shows excrescences of the size of a small pea. The color of the muscles of the left endocardium is brownish yellow.

The lungs are somewhat pale and slightly œdematous, but otherwise normal. The spleen is large; its substance moderately soft; the malpighian bodies are much developed and of a gray and white color.

Both kidneys are very strong, showing single, irregular gray spots in the yellow-colored cortical portion; the curved uriniferous tubes contain coagulated and free blood, the straight ones cylinders.

The liver, large, pale-red, has no amyloid reaction.

In the middle sized uterus we find a superficial ulceration at the os, probably caused by an old pessary, which was found in the vagina.

The thyroid gland is much swollen and dark red.

These observations show a rare example of rapidly developed endocarditis of the pulmonary valves—rare, because it is a great exception that the endocarditis of the ostium pulmonale is the chief disease of the heart, while cases with secondary disease of the valves of the right heart, following diseases of the valves of the left heart are, although rare, more often found. Another peculiarity is the aneurismal enlargement of the pulmonary artery.

The articular rheumatism manifested itself only seven months before death, and supposing the valvular endocarditis had taken place before this time, it would be hard to believe that this enlargement of the pulmonary artery, as a sequel of the diseased ostium pulmonale, could obtain such an extent in so short a time.

I have myself, in former years, directed the attention of the profession to the fact that insufficiency of the aortic valves may produce an enlargement of the circumference of the aorta at its origin, but in all cases which I had observed the time of years was required to effect this. I would rather believe that the existing enlargement of the pulmonary artery has contributed to fix the rheumatic endocarditis at its origin and at the corresponding valves.

The correct diagnosis was not made out during life, and therefore I give this case more in detail in order to aid in diagnosis one or the other of my colleagues, when they should happen to meet a similar case in their practice.

GLEANINGS FROM FOREIGN JOURNALS.

Translated for the REVIEW by J. H. Carstens, M. D.

M. GILLETTE, in the "Sociêtê de Mêdicine de Paris," in a paper on Mammary Abscess (*Annales de Gynecologie*, Jan., 1876), concludes as follows:

During the whole course of treatment, I have thought it essential to maintain the breast close to the thoracic walls. In general, I believe there ought not to be in the therapeutics of abscess of the breast any absolute rule, but in a general way we may give the following directions:

1. Abstain from opening abscesses of the areolar tissue.
2. In the majority of cases, delay opening abscesses of the parenchyma, unless the pain is excessive. In this case, caustics may be used advantageously.
3. The use of drainage and the soft rubber tube is often of excellent service.
4. Prevent the development of abscesses, aid the disgorgement of the breast, and avoid the formation of new collections, and *hold up the breast to the thorax continually by the bandage.*

In the Acadêmie of Médicine, M. Deuncé read a paper on the ablation of the body of the uterus in irreducible inversion, *external hysterotomy* (*Archives Generales de Medicine*). His conclusions are as follows:

1. External hysterotomy is an extreme surgical resource, but precious, in cases of irreducible inversion that immediately threaten the life of the patient.
2. The operation does not show greater mortality than other grave operations.
3. In the actual state of science, it should be given preference over the ligature.
4. The first months of an inversion (also the first year) as much as possible attention should be given to the repeated efforts of reduction, to the lactation, which is generally suppressed, to the hemorrhages, and to the palliatives of all sorts.
5. The operation should be reserved for cases recognized as irreducible, and for that period when the disease is firmly fixed,

when the inverted uterus is completely turned on itself, and has taken a new form brought about by the adjoining organs, and which leaves less chance for peritoneal inflammation.

THE NERVES OF THE CORNEA. (*By Dr. Leopold Kœingstein, Medicinisch-chirurgische Rundschau*, March, 1876.)

After different technical trials to reach the nerves of the cornea and find their relations, K. tried the method of isolation, and found that method best, which consists in macerating a frog's cornea, colored with chloride of gold, in a mixture consisting of equal parts of muriatic acid and distilled water. The corneal cells and the nerves are by this method beautifully isolated, and K. could observe that the nerve's finest periphera are attached to processes of the corneal cells, therefore do *not enter* the nuclei of the same. What Lipman observed, viz: the passage of nerves through the membrane of Descemette and an ending of them in the cells of the endothelia, K. could not observe, but could only see, in the very clear isolated specimens, an attachment of the minutest nerve periphera to the membrane of Descemette.

To the technic of this maceration and isolation method, K. adds that he has added to that concentrated muriatic acid mixture a few drops of glycerine to diminish the tendency to brittleness of the isolated tissues.

The time required for maceration is in general about twenty-four hours for the cornea of a frog. Thicker corneas, those of the mammalia or man, probably need to be lamellated.

Reports of Societies.

PROCEEDINGS OF THE NORTH-EASTERN DISTRICT MEDICAL SOCIETY.

THE semi-annual meeting was held at Rochester, Wednesday, June 21, 1876.

Owing to the absence of the president and vice-president, the meeting was called to order by the secretary. On motion, Dr. McColl, of Lapeer, was elected president *pro tem.*

On the calling of the roll, the following members responded, viz.: Drs. McColl and Nash, of Lapeer; Dr. A. Yates, of Washington; Drs. J. E. Wilson, J. C. Wilson, and F. M. Wilcox, of Rochester; Dr. O. E. Bell, of Oxford; Dr. P. A. Knight, of Utica; Drs. A. E. Leete, S. L. Andrews, Wm. Greenshields, James Harvey and J. B. Fares, of Romeo.

Dr. James Yates, of Roseville, Dr. A. R. Reynolds, of Orion, and Dr. John J. Travis, of Oxford, were recommended as fit and proper persons for members.

Drs. Bell, Knight and Wilson were appointed a committee on investigation of credentials, and reported favorably. The report being filed, the above applicants were unanimously elected to membership.

The minutes of the last meeting were read and approved.

Dr. McColl, of Lapeer, gave a report of the transactions of the State Medical Society regarding the action of the same with respect to homeopathy in the University of Michigan.

Dr. A. Nash, of Lapeer, reported that Dr. J. G. Bailey, of Port Huron, was expelled from the St. Clair, Sanilac and Lapeer County Medical Society at its last meeting, held on the 30th day of May, 1876, for violation of the second and fifth articles of the code of medical ethics.

Resolved, That the above report of Dr. Nash be received and placed on file.

Carried.

The following resolution was offered by Dr. S. L. Andrews, and seconded by Dr. Wilcox:

Resolved, That scientific medicine and homeopathy are entirely incompatible, and that it is inconsistent with the honor of the medical department of the University and its faculty to teach classes of homeopathic students.

Carried.

At this stage of the proceedings, Dr. McColl introduced to the society a patient having some disease of the stomach or œsophagus, which the members failed to diagnose.

Dr. Wilson presented a patient suffering from hip joint disease, which proved very interesting to the members.

On motion, the society proceeded to the discussion of the day; subject: "Quinine; its therapeutics."

In opening the discussion, a paper on quinia was read by the secretary, for which he was tendered a vote of thanks.

Dr. Fares said: Would not give as large doses as are often recommended; neither would I give it to menorrhagic patients, as I think it does harm to such cases. I would give it freely in tonsilitis, also in cutaneous erysipelas, where, I think, it acts as a specific.

Dr. Greenshields said: I usually give it in doses of from one to three grains. I have never in my life given over five grains at a dose. In the treatment of pneumonia I use water instead of quinine, and I think its effect is equally as good in cases of inertia of the uterus. I have never obtained any stimulant effect.

Dr. Wilcox said: Quinine is more widely used than any other medicine, excepting the opiates. I believe that quinine is a general systemic stimulant. I give it in low forms of inflammation, particularly those of a diphtheritic nature. It is also invaluable in many cases of cerebritis and meningitis. I think a good dose for an adult is three grains given three or four times daily, and I would administer it regardless of either chills or fever.

DR. KNIGHT said: In some parts of our district larger doses are required than in others. Nearly all the cases of disease occuring in my practice during the months of September, October and November have a tendency to periodicity, and I give quinine in doses ranging from three to thirty grains, according to the apparent demand of the case. I have often given three doses of quinine of twenty grains each to an ague patient for the purpose of breaking up the attack, and I have but rarely been disappointed in its effects. I find nothing superior to quinine in the treatment of neuralgic affections, and I find that nearly four-fifths of all my neuralgic cases reside in malarious districts. I give quinine in tonsilitis, inflammations, etc., and I have seen the pulse reduced from 130° to 90° in cases of acute rheumatism from the use of three doses of twenty grains each of the drug. I have not given much quinine during the acute stage of pneumonia, but I give it as soon as that stage is over, particularly if there are any typhoid symptoms; but I must say that my typhoid cases suffering with head symptoms do not bear the use of quinine very well.

DR. YATES, of Roseville, said: I usually give quinine in from three to five grain doses. In cases of rheumatism and pneumonia I usually give doses of from three to five grains each, and almost invariably with good results. In cases of atony of the uterus, I have given it in ten grain doses with good effects. I also give it in cases of abortion.

DR. TRAVIS, of Oxford, said: Would give quinine usually in doses of five or six grains each, and would give from twenty to thirty grains during an intermision. It is questionable if large doses of quinine are assimilated.

DR. J. C. WILSON, of Rochester, said: Quinine has been well proven to be a stimulant. Large doses produce irritation of the stomach. The anti-periodic effect of quinine is well known. I believe that its sedative action is produced by its powerful influence over the brain, causing hyperæmia or congestion of that organ, the sedation following as a consequence of the congestion. As a uterine stimulant, it must be given in large doses. For the purpose of interrupting fevers of miasmatic origin, a smaller quantity of quinine is necessary than in those cases of irritative fever of a neuralgic character. As a rule, I do not give it in inflammations, unless I think that the inflammation will do my patient more harm than the use of quinine will. I also believe that quinine increases the amount of the fibrin in the blood.

DR. NASH, of Lapeer, said: Quinine is an anti-periodic, antiseptic and anti-pyrètic, and as it is so highly lauded by eminent authorities, I would give it in large doses in pneumonia, and I think that I have seen cases of pneumonia aborted by its use. As an antipyretic, I have given five or six grains at a dose every three hours with good effect, lowering the temperature from 103½° to 101½° during twenty-four hours, with also a lessening of the brain symptoms. And this is the history of several cases that I have treated.

Dr. ANDREWS, of Romeo, reported a case of a man in Italy suffering from ague, who took at one dose a whole bottle of quinine containing an ounce, with no evil effect.

Dr. HARVEY, of Romeo, said: I do not usually give it in larger doses than from one to four grains, but I have given it in ten grain doses in intermittent neuralgia with good effect. I had a case of ague immediately preceding confinement. I gave good doses of quinine, which broke it up, but immediately after confinement all the symptoms of phlegmasia dolens set in. I gave good firm doses of quinine, aborting, as I believe, the phlegmasia dolens, as my patient rapidly convalesced.

Dr. BELL, of Oxford, said: I use quinine as an alterative stimulant and a sedative. I give in small doses from the commencement of pneumonia with good success. I have never seen a case of confinement where I believed that quinine was necessary. I regard it as a specific in ague.

Dr. McCOLL, of Lapeer, said: While I regard it as good in malaria, I think it is good in other diseases. I believe that it is also a good anti-pyogenic remedy, and as an anti-pyogenic, I should use it in doses of ten or fifteen grains. It is also a good anti-pyretic, being much more permanent in its effects than water. The means by which it lowers the temperature is not yet fully understood, but as an antipyretic I would give it in doses of twenty to thirty grains. I would not give it from the commencement in all cases of pneumonia, but in cases of purulent infiltration I would give it in doses of twenty or thirty to fifty grains, according to the apparent urgency of the symptoms. I had a case of pneumonia in a boy, whose temperature was 104°. Immediately I gave him ten grains; two or three hours afterwards I gave him ten grains more, and his temperature fell to 102½°, and my patient's temperature never arose afterwards, and he got along nicely. I have not noticed any positive symptoms of hyperæmia of the brain from the administration of large doses, but I have sometimes combined it with bromide of potassium, for the purpose of avoiding the possibility of such hyperæmia, although not invariably by any means. Neither have I noticed irritability of the stomach arising from the administration of large doses.

The discussion being ended, the society adjourned to meet next January, at Romeo, Michigan, subject to the call of the president and secretary.

HUGH McCOLL, M. D., *President, pro tem.*

ALBERT YATES, M. D., *Secretary.*

PROCEEDINGS AT THE MEETING OF THE STATE BOARD OF HEALTH OF MICHIGAN, JULY 11, 1876.

Reported by the Secretary, Dr. H. B. Baker.

THERE were present, Dr. H. O. Hitchcock, president; Dr. R. C. Kedzie, Rev. J. S. Goodman, Dr. A. Hazlewood, and Dr. Henry B. Baker, secretary.

There was considerable discussion over the present system of oil inspection in the State. Notwithstanding the great saving of life under the new law the Board is not yet satisfied, but is striving for even better results. A thorough report on the subject was presented by Dr. Kedzie.

Dr. KEDZIE presented a paper on "Means of Escape from Public Buildings in case of Fire." It was a strong plea for a law requiring the doors of all public buildings to open outwards; and that there should be some means of escape from each hotel room. In buildings of this character, the flames generally follow the stairways and elevator openings.

Dr. KEDZIE also read a paper and presented a model illustrating his new plan for ventilating railroad cars. By his method the air is introduced free from all dust and cinders, is evenly distributed through the car in sufficient quantity without sensible draft, and at the same time the foul air is rapidly withdrawn.

By request of the Board, and for information of its members, Dr. Kedzie read a report of the meeting of American Medical Association, at Philadelphia, he having been chairman of the section on public health in that association.

Dr. BAKER presented tables and diagrams showing the death-rate under various conditions of climate, etc.

Dr. HAZLEWOOD read a paper in which he gave facts and figures concerning the advisability, and the dangers to be avoided, in vaccination for the prevention of small-pox. It contained a complete history of vaccination from its discovery, and presented statistics showing the decrease in the death-rate from small-pox by means of vaccination.

S. DAY, of Ann Arbor, presented a plan for a water filter, applicable to filtering water as it enters cisterns. He claimed that the action of the filter was automatic, and that because of the intermittence between storms the charcoal is enabled to renew its purifying power. He also claimed that the character of the water could be modified by the incorporation of certain materials in his filter, whereby iron, lime, etc., could be added if desired, or its freedom secured from all substances which tend to render it hard.

Dr. BAKER read a report relative to a portion of the work done in the office of the secretary since the last meeting of the Board. The report showed general progress in the work of the office. It accounted among other things for the distribution of some 2,600 copies of the Third Annual Report, about half of them to officers of local boards of health, and the rest to sanitarians, etc. It also mentioned the performance of a large amount of other routine and special work.

By request of an officer of the State Public School at Coldwater, the secretary, in addition to his office duties, made an examination of the sanitary conditions of that institution, and had carefully written out and sent to the Board of Control a detailed report of the conditions, with suggestions and advice in relation to the sanitary management of that institution. The report itself was not submitted at this meeting.

Dr. **Baker** presented a plan for the registration of diseases similar to that adopted by the State Board of Health of Massachusetts. This plan contemplates asking leading physicians in various parts of the State to report diseases prevailing during stated periods of time, on postal-card blanks furnished by the Board; also requiring such reports from the health officers of all cities in Michigan. The project was adopted.

A communication from A. A. Day, State inspector of illuminating oils, in reference to fees of deputies, etc., was read and placed on file.

A communication from J. T. Elliott, of Grand Rapids, relative to the unhealthfulness of decaying sidewalks, was read and referred to the committee on decomposing organic matter, etc.

A communication from L. P. Alden, of the State Public School at Coldwater, giving a detailed account of the sickness at that institution, was read and referred to the committee on epidemic diseases, etc.

The secretary announced coming meetings of prominent associations as follows:

American Social Science Association, at Saratoga, September 5 to 8; International Medical Congress, Philadelphia, September 4 to 9, and American Public Health Association, Boston, October 3 to 6.

A valuable paper by Dr. O. Marshall, of Lansing, giving a detailed account of scarlet fever as it prevailed at North Lansing, in 1875–6, was read and ordered published in the Annual Report. It was an important contribution to the study of this disease, containing many facts bearing upon its restriction and prevention, and on the causes tending to render it malignant. It was accompanied by a carefully drawn map.

A communication from J. M. Loop, M. D., of Port Sanilac, giving details of cases of typhoid fever attributed to the use of impure water, was read.

The following were proposed as correspondents to the Board: Drs. J. M. Loop, D. Todd, N. H. Kimball, E. Batwell, O. Marshall, John C. Wilson, and Robert Johnston.

The Board adjourned.

Correspondence.

VIENNA, Austria, June 1, 1876.

To the Editors of the Detroit Review of Medicine:

GENTLEMEN—I read with pleasure in the May number of the REVIEW, under the head of "Reports of Societies," many protests in epistolary form against the introduction and continuance of homœopathy in the State University of Michigan. As a graduate of 1874 and as a desirer of the well being of the University, I hope you will find room to print and make as public as possible the enclosed article in your REVIEW. This communication I desire to divide into two portions, viz.: 1st, The relations in which we and patients stand to "pathies;" 2d, A scheme for a national degree for medical men.

I. *The relations in which we and patients stand to the "Pathies."*

(*A*). THE PUBLIC.—We will preface by stating that we are not bigoted or unduly prejudiced against homœopathy or any peculiar system of medicine, although we most earnestly disavow and disclaim any sympathy in any such or similar "pathy." The exponents of their systems may possibly be perfectly sincere, as many having been bred in the full belief of their tenets, have been educated in them, have accepted them, have blinded their reason by them, and have at last died in them, and although we may regret it, we cannot so much blame them. In religion, in politics, in superstition, the result is the same. The parents and surrounding favorable circumstances inculcate and firmly fix erroneous and often even absurd opinions and beliefs in us so firmly as to become part of our entity. Men, during childhood, educated in a religious belief, in the prime of life, by exercise of reason, frequently change this faith and may live years in this second faith, but on the death-bed, overcome by fear of death, pain and weakness, and, more than all, by early remembrances, they abjure their second belief for the first. This proves only how early education and impressions blind and overcome our will, our judgment, our reason. The public cannot and ought not (for their own protection) to decide which system is, or is not correct. If I wish to build a house I call in an architect. Anybody? No, one who is an architect by education and profession. If I do not rely on his single judgment, do I consult my neighbors, who are as ignorant as myself? No, I solicit the aid of his professional brethren who have studied similar books, have had similar experience and have similar *educated* intelligence as himself. Their opinion is my guide. If I am in an action before a court of law, do I rely on my neighbor's advice, who "reckons that his case ten years ago was thus and so, and that mine will be so and thus?" Or do I go into court with, say the book entitled "Every man his own Lawyer," or, "The Green Book of Common Law?" Would I be allowed there to argue without ryhme or reason, jump at false conclusions and cross and re-cross the pons asinorum? No, if I have a suspicion of common sense I go to the architect, who is consulted with by his brothers, or to the legal peer who is honored by his educated colleagues. Not to the man who avows he is architect by his *own* system, or to the lawyer whom the *people say got* his client so cleverly out of that seduction business. Why, then, in the name of common sense, when a man wants a *tub* even, constructed, and goes to a man who by skilled training and business is a tub-maker and submits to his ideas (on that subject) and not to a founder, a trader, or a barber, in this contemptible matter—why, then, in the name of common sense, I repeat, will the people, ignorant as they are of all the branches of medicine, venture or dare to confide in their own uneducated prejudice and select a man, merely according to their own sweet will, to take care of their comfort and health, even when they acknowledge the value of health and their own entire ignorance of disease. If, then, it is admitted that a valuable opinion is not to be had from a person totally ignorant of the discussed subject, why then should petitions from the people or opinions of lawyers and clergymen, force any "pathy" on us, any more than we should by popular prejudice force Paganism or Star Chamber decisions on those of whose professions we are ignorant. Farmers, mechanics and trades-people cannot decide questions of law, theology or medicine, neither can the people decide for the University any valuable method or form of self-administration. Let, then, the priests select their own bishops, the lawyers their judges, and the medical men their *professors* or principals. If this be right, have the legislators and other medically ignorant men any right to say who shall or shall not teach, or what shall or shall not be taught in the University medical department? If the public will support only what we consider fraudulent, let us not connive with the evil. If homœopathy is ever forced in my State (Iowa) University, I shall most arduously advocate the establishment of chairs of eclecticism, spiritualism and Chinese, and every other system. If the people should then object to taxation for this purpose, there would be three alternatives, viz.: Placing the University affairs in the hands of those who are fitted by education and knowledge to govern it; opening its doors to a teacher of every system (right or wrong), or forever closing its doors to any subject on which there was a difference of opinion, and thus save science from insult, from assumption.

(*B*). The Profession.—We, as medical men, members of County and State Societies (subservient to the code of ethics of our National Medical Association), cannot but regard homœopathy as fraudulent and disreputable, and as it is therefore our duty to support the standing and dignity of the profession and to discourage any association with or recognition of any "pathy," and as the professors at Ann Arbor, from either erroneous conceptions or desire to continue in their present positions, still teach, would it not be well for the medical societies to exclude any future graduates from A. A. from their ranks as irregular (after due notice) as long as any peculiar system is taught in the University medical department. By permitting or attending lectures and virtually admitting homœopathy as a science, we lower our own professional tone and degrade our ethical conceptions. So let each and every one introduce a resolution into his Society for the exclusion of future A. A. graduates from the ranks, and if this resolution be passed, publish it, and then endeavor to pass the same through the National Association. Every graduate must have deplored the day when the University opened her doors to teachers of what we regard as false, for the bribe of a State appropriation, and if others, like myself, were daily (almost) asked by men whose good opinion we covet, "Did you learn homœopathy in A. A., and do all the professors there and you believe and practice it?" they would deplore it also. American medical men from New York, Indiana, Ohio, Kentucky, Virginia and Pennsylvania, have asked me the same and similar questions, and it will be a matter of regret to any future graduate to say that he attended Michigan University, when other good institutions were near at hand, as long as quackery holds two chairs in the medical department.

II. *A project for a National Degree for medical men in the United States.*

(*a*). Two degrees to be given by Government (not State) authority—one for Surgeons, to be entitled Doctor of Surgery, the other, Doctor of Medicine (D. S. and M. D.) for general practitioners.

(*b*). A preliminary examination, definite time of study, certain hospital experience and advantages, number of studies and *kind*, to be decided on by the Board.

(*c*). The examining board, to be selected by the National Association, to have yearly examinations in each State, the schools to be attended be published, and a certain fee for examination be paid by each applicant, and the Government degree to be conferred on those who pass, with only the actual cost for printing. The examination fees to defray the expenses of the Board.

(*d*). The Board to be instructed by the General Association as to length and character of examination and certain differences in the examination in anatomy, surgery, etc., as to whether the applicant for the degree is wishing the medicine or surgery qualification.

(*e*). Practitioners of a certain time and standing (professional) to be not subjected to further examination.

(*f*). These degrees are to entitle the holder to practice medicine, surgery, or both, make post-mortems, sue for fees when necessary, serve in any local or general (medicine and surgery, or both) capacity (Government or State), without further examination, and only those approved of by this legislation to be allowed to assume the titles.

Although I despair of these restrictions being legalized for years, yet the attempt to dignify the profession and supply the public with trustworthy men, should be incessantly persevered in.

F. E. BODEMANN, M. D.

MEDICAL MATTERS IN MICHIGAN—DISCUSSION BY THE FACULTY OF MEDICAL DEPARTMENT OF MICHIGAN UNIVERSITY AND THE RUSH MEDICAL COLLEGE.

UNIVERSITY OF MICHIGAN, ANN ARBOR, July 12, 1876.

Editors of Detroit Medical Review :

DEAR SIRS—The subjoined statement is respectfully submitted for your information ; the faculty of the Rush Medical College, of Chicago, in session of July 5th, 1876, enacted the following resolution :

> *Resolved,* That the time and attendance of students upon lectures of the Medical Department of the University of Michigan, up to and including the last regular session of that college, may be recognized as part of the requisites for graduation in this college; but such time and attendance shall not hereafter be accepted, so long as the teaching of Homeopathy, in whole or in part, shall be included in the course of study in that institution.

The significance of this resolution depends entirely upon the interpretation given to the words "*in that institution.*" If by them is intended the old, regular school, which is clearly and alone referred to in the first clause, then the resolution is of no effect, for the teaching of Homeopathy is not now and never has been, "in whole or in part," included in the course of study in that institution. If the "Homeopathic Medical College" be referred to, then the faculty of the Rush College have committed themselves to the inconsistent principle that because homeopathy is taught to the students of one college, they will therefore refuse to recognize the students of another college who have no connection or association with the first named, and whose education is as orthodox and regular as that obtained at any school in the country.

Much of the controversy that has grown out of the introduction of homeopathy into the University of Michigan is, without doubt, due to a simple misunderstanding of the situation. Our university consists of a number of distinct colleges, each created by separate legislative enanctment and each having its own faculty and organization. Two of these colleges are medical. One of them—the old, well-known, regular school—is by statute entitled "*The Department of Medicine and Surgery.*" The statutory title of the other is "*The Homeopathic Medical College*"—created last year. Homeopathy is taught in the last named college, but in no way, directly or indirectly, is it included in the curriculum of the first. The peculiar wording of the resolution leads to the suspicion that possibly the authorities of Rush College have been misinformed in the premises, as we know certainly many others have been. At any rate, if the above facts can be kept clearly in mind, they will contribute greatly to the ultimate and we trust amicable solution of the question at issue.

The leading medical colleges at the East, who have voted to receive our tickets and recognize our students, have drawn the distinction between the two schools of the University of Michigan by stating explicitly that this privilege is not extended to students who receive instruction in "irregular" medicine.

Very respectfully,
Your obedient servant,
E. S. DUNSTER, M. D.,
Acting Dean, Department of Medicine and Surgery, University Michigan.

HOMEOPATHY IN THE UNIVERSITY OF MICHIGAN.

The following correspondence is self-explanatory:

UNIVERSITY OF MICHIGAN, ANN ARBOR, June 16, 1876.

Rush Medical College, Chicago, Ill.:

TO THE DEAN: Dear Sir—I am instructed by our faculty to inquire whether your college will accept the tickets and recognize the diploma of the Department of Medicine and Surgery (the old regular school) of this University. Frequent inquiries are made by our students as to whether their time will be allowed in other colleges, and we desire now to be able to state officially to them what the position of the leading medical colleges of the country is on this question. An early reply will oblige.

Yours, very truly,
E. S. DUNSTER,
Acting Dean.

RUSH MEDICAL COLLEGE, CHICAGO, July 5, 1876.

The following resolution, adopted to-day by the faculty of this college, contains an answer to questions relative to homeopathy sent to this institution by the Dean of the University of Michigan:

"*Resolved*, That the time and attendance of students upon lectures of the Medical Department of the University of Michigan, up to and including the last regular session of that college, may be recognized as part of the requisites for graduation in this college; but such time and attendance shall not hereafter be accepted, so long as the teaching of Homeopathy, in whole or in part, shall be included in the course of study at that institution."

J. H. ETHERIDGE,
Assistant Secretary.

UNIVERSITY OF MICHIGAN, ANN ARBOR, July 10, 1876.

J. H. Etheridge, M. D., Secretary Rush Medical College, Chicago:

DEAR SIR—Your favor of the 5th inst. is received. In reply, I beg leave to ask again for more definite information on the point in question. The last clause of your resolution says "so long as the teaching of homeopathy, in whole or in part, shall be included in the course of study *at that institution.*" Homeopathy is taught in the "College of Homeopathy," but not in any way, direct or indirect, in the "Department of Medicine and Surgery," which is the old medical school of this university. Our school and our students have no more association or relation with homeopathy than your school and your students. The homeopathic students, however, are required to listen to our lectures on the fundamental branches of medicine. The curriculum is unchanged, save that it is gradually being increased in severity of requirements, both for admission and graduation. Will you, therefore, please advise me whether, by the words "*at that institution*" in your resolution, you mean the Department of Medicine and Surgery, *i. e.*, the old medical school, or whether you mean the "University of Michigan" as a whole, which includes, of course, all its separate colleges, the homeopathic among the rest. There has been, and still is, much misunderstanding of the situation of the University of Michigan, relative to homeopathy, and the wording of your resolution leads me to infer that you have adopted the opinion which has been very industriously circulated by our enemies, that homeopathy is taught in our college, and that the homeopatic professors are part of our faculty, in both of which statements there is not a grain of truth. Regretting to again trouble you with this matter, and hoping for a speedy reply,

I am, very respectfully,
Your obedient servant,
E. S. DUNSTER, M. D.,
Acting Dean.

CHICAGO, July 17, 1876.

Prof. E. S. Dunster, M. D., Acting Dean:

MY DEAR SIR—Your note to the assistant secretary, relative to the clause "at that institution" which is contained in the resolution adopted by the faculty of Rush Medical College, has been handed over to me for reply. In response to your desire for "more definite information," I have to say:

First, That the legislative device of the board of regents of the University of Michigan fails entirely to obscure the fact that the medical department, in connection with two homeopathic professors, is engaged in educating homeopathic students to become homeopathic practitioners.

Second, That when that device calls two homeopathic professors a "medical college," or a "college of homeopathy," and requires the medical department to instruct the homeopathic students on all subjects except homeopathy, therapeutics and practice, it practically establishes a copartnership of effort in the education and manufacture of homeopathic doctors.

Third, That when that device requires the medical department not only to instruct homeopathic students, but also to report to the board of regents upon the proficiency of those students; and when, upon that report and a similar report from the two homeopathic professors, the board proceeds to confer upon those homeopathic students the degree of M. D., the enactment of that device essentially marries the medical department to the so-called homeopathic college, and degrades it to the general level of fraud, delusion and farce.

I have the honor to be
Respectfully and sorrowfully yours,
MOSES GUNN.

ANN ARBOR, July 20, 1876.

Editors Detroit Review:

GENTLEMEN—A new "Statement of the faculty of the department of Medicine and Surgery," written, as it appears, by the acting dean, Dr. E. S. Dunster, has recently fallen into my hands. Having been used to enlighten the minds of the members of the American Medical Association, we think it not at all surprising that it so signally failed to produce any change of sentiment, in view of the unanimous passage of a resolution significantly pointing to the faculty as persons engaged in "aiding and abetting in the graduation of irregular practitioners," and distinctly acknowledged as such by the feeble attempt of Dr. Frothingham to put off the evil day by referring such a simple phase as "aid and abet" to the judicial committee, instead of submitting at once to the authority of Webster. So much of the pamphlet as is occupied with the discussion of the action of the State Medical Society, whether historically or in its late action, we do not propose to examine. We propose to limit ourselves to calling the attention of your readers to the fictitious character of a few paragraphs near the close of the "statement," justly claiming affinity to the railroad literature enclosed in yellow covers.

Desirous of claiming some merit for allegiance to the State Society, the acting dean writes: "The faculty desire further to represent to this association that they have always acted according to the instructions of their State Society (the following resolution, passed by the society, 1865, the only one ever passed), being their guide:"

Resolved, That until such time arrives that the Board of Regents shall change the curriculum of the medical department, we are of the opinion that the professors thereof should continue to hold their respective chairs. But should such a change be accomplished as would directly affect the curriculum, we believe that in honor to themselves and the profession to which they belong, and whose sympathy they receive, they could not consistently remain, and their resignations should be respectfully submitted.

The acting dean continues: "In 1868 a change was made affecting the curriculum, and the faculty promptly tendered their resignations. The regents, after some months, rescinded their action rather than accept the resignations."

In reply to these statements, we offer a few historical data: 1st. To the date of the passage of the resolution of the State Society. It could not have been, as the acting dean states, in 1865, as the society had *then* no existence. 2d. The proceedings of the State Society show that the resolution *was passed* June 4, 1868, and hence could have no influence in determining the action of the faculty in writing their resignations, as several of the faculty had accepted chairs in the Detroit School of Medicine several months prior to this action of the State Medical Society. But the fallacy of the dates was necessary to prove the premise that the faculty had acted in obedience with the resolutions of the State Society.

Again; the acting dean complains most piteously that the faculty were denied the sympathy and support of their professional brethren, especially those of Detroit. In evidence of their cruelty, he writes: "While it was expected that the regents would accept their resignation and organize the school from those who would fraternize with homeopathy, Dr. Sager, by request of the faculty, visited Detroit to confer with the profession there, with a view to making some arrangements by which in that city we might continue our school. He returned and reported to us that he had had an interview with Dr. Jenks, and others, and that they proposed to organize a *new* school and fill all the important chairs from their own members, and that as they held all the appointments in the hospitals, we would find it difficult to organize there."

We are reluctantly compelled to pronounce this statement, both in spirit and letter, a complete fabrication, having no foundation whatever.

The facts, which may be readily verified, are simply these. On the 25th of March, 1868, the Board of Regents passed the following resolutions, viz.:

Resolved, That the Board of Regents accepts the proffered aid from the Legislature of Michigan, by the act approved March 15, 1867, with the terms and conditions thereof.

Resolved, That in order to comply with the conditions imposed by said act, there be organized in the department of medicine a school to be called the "Michigan School of Homeopathy," to be located at such place other than Ann Arbor, in the State of Michigan, as shall pledge to the Board of Regents by June 20th next, the greatest amount for the buildings and endowment of said school.

Resolved, That two professors be appointed for said school, one at this time and another prior to the opening of said school, and others as may be necessary.

On the 28th of March those members of the faculty still remaining in Ann Arbor (Drs. Palmer, Greene and Sager) by appointment, had an interview with the trustees of Harper's hospital, and the gentlemen about organizing the Detroit Medical College, and after a courteous discussion the faculty returned, in general quite satisfied with the results of the interview. We feel quite sure of the concurrence of both faculties in saying that the spirit of the meeting was entirely amicable and conciliatory.

A few weeks later, the decision of the supreme court practically rescinded the action of the regents, and, with the exception of the professors of surgery and materia medica, the rest of the faculty having never in fact tendered their resignations, returned to their positions in the medical department.

The facts above stated must still be fresh in the mind of the dean, Dr. Palmer, who alone of the present faculty, is personally conversant with the facts. We are, therefore, greatly surprised that the statement of the acting dean should ever have been allowed to appear in a document purporting to be from the faculty.

Furthermore, it will be seen that the resolutions of the regents contemplated a separate (nominally) college of homeopathy, with two professors, and to be located at Detroit or elsewhere, and in all respects quite as distinct and independent as that existing under the present organization, but the question, now so great a bugbear in the estimation of the faculty and their abettors, whether a homeopathic faculty were to be their successors, or whether it would be cowardly to abandon the department to the irregulars, was never raised by the faculty of 1868, but with one accord they decided that in their judgments the purity and dignity of the profession was the primary consideration; all other questions in regard to schools and professors and salaries, were considerations of but secondary and minor importance, hence their decisions were registered, their resignations written prior to any advice from the State Society, and awaited only the definitive action of the Board of Regents.

Respectfully, A. SAGER.

CHILDREN'S DIET.—Dr. C. R. Agnew (*Sanitarian*, October, 1875), while discussing the causes and treatment of phlyctenular ophthalmia, makes the following pertinent remarks: "If children, when weaned, were first put upon a milk diet and then upon a milk and farinaceous diet, we would see a vast improvement in public health, and a lower death rate. We would, moreover, see less of those forms of self-indulgence which spring from the uncontrolled selfishness and gluttony that begin at the nursery table."

Condensations from our Exchanges.

PRACTICE OF MEDICINE AND THERAPEUTICS.

ACUTE RHEUMATISM TREATED BY SALICYLIC ACID.—Dr. Stricker (*Berlin Klin. Woch.—British Medical Journal,* May 6, 1876) sums up the results obtained in treating fourteen cases of acute rheumatism by salicylic acid, as follows:

1. Salicylic acid appears to be a rapid and radical remedy in acute articular rheumatism.
2. It can be administered in hourly doses of seven and one-half to fifteen grains, without injury to the human system.
3. It can be given in this way for a longer time to young and vigorous subjects than to the old and feeble.
4. In the latter toxic symptoms appear sooner than in the former.
5. The toxic symptoms are of various degrees.
6. The most usual are noises in the ears, difficulty of hearing, and perspiration. When these appear, the continued use of the medicine is contra-indicated.
7. If the salicylic acid acts thoroughly in the manner expected of it, there should be, during the treatment of articular rheumatism by a certain quantity given internally, no retnrn of the disease in a hitherto unaffected joint, nor any secondary inflammation of the endo-cardium or other serous membranes.
8. In order to prevent a relapse it is necessary to continue the use of the salicylic acid in small doses for some days after the end of the principal treatment.
9. Salicylic acid is of doubtful use in chronic articular rheumatism.
10. It is not likely to be useful in gonorrhœal and dysenteric rheumatisms, or in sepæmico inflammation of the joints.

SALICYLIC ACID AS AN ANTISEPTIC.—C. E. Buss (*Deut. Arch. fur Klin. Med.—London Medical Record,* May 15, 1876) gives as results of his observations the following:

1. In its action as an antipyretic in the treatment of wounds, as well as in its action on the human organism, salicylic acid shows a very remarkable agreement with quinine.
2. No other unpleasant consequences are found to attend the use of salicylic acid than those which follow the administration of quinine.
3. No irritating influence of any importance is exercised on the mucous membrane of the mouth, stomach or bladder.
4. In healthy individuals large doses (45 to 60 grains) first produce a stage of congestion, with a feeling of warmth and perspiration over the whole skin, and impaired hearing and vision. This lasts about a quarter of an hour, and is followed, if the dose be sufficient, in about two hours by tinnitus aurium, which also disappears in about two hours.
5. Febrile patients, to whom larger doses have been given, show the above mentioned symptoms. There is a total absence of any other influence, especially narcotic, on central organs, even with large doses. There is a remarkable reduction of temperature and of the frequency of the pulse. Twice as much salicylic acid as quinine is required to produce this lowering of the temperature. With such doses the antipyretic effect of salicylic acid is at least as certain as that of quinine. The greatest antipyretic effect is obtained as the result of two large doses given in twenty-four hours —morning and evening.
6. Salicylic acid can be easily detected in the urine a short time after it has been taken, but most abundantly after the end of thirty-six hours. Iron salts produce a dark violet color.

7. Salicylic acid can also, after its administration, be detected in the sweat, saliva and sputa, by the same reagent.

8. The quantity required being considered, salicylic acid is five times as cheap as quinine. Buss gives salicylic acid in doses of thirty grains with fifteen grains of sugar. The latter assists the suspension of the acid in water, and renders the taste more pleasant. It may also be given in water. Dr. Jahn (*Der Feldarzt*) obtained very similar results from his personal experience.

SALICYLIC ACID IN HECTIC FEVER.—Dr. Sentor (*London Medical Record*, May 15, 1876) reports fifty observations upon the effect of salicylic acid in the hectic of phthisis. In some cases the effect was very marked, the temperature being remarkably reduced; in others no effect was observed. The doses given were small.

SALICYLATE OF SODA AS AN ANTIPYRETIC.—Dr. Nathan (*Deut. Zeit. fur Prakt. Med.—London Medical Record*, May 15, 1876) has used this remedy in twelve cases, viz: nine of enteric fever, one of phthisis, one of osteomyelitis of both tibiæ, and one of subperiosteal resection of the femur. In all cases the temperature, which was often excessively high, was reduced by salicylate of soda. The best antipyretic action was obtained by large doses often repeated—two drachms, repeated in two hours until an effect was produced. After the temperature had become normal, smaller doses prevented the further rise of temperature. The remedy is given in water, one part to four or five. As an antipyretic he regards the salicylate of soda as preferable to quinine, digitalis and veratria. The foregoing results are confirmed by many different observers, as L. Riess, Goltdammer, C. Moeli, in various issues of *Berliner Klin. Wochenschrift;* Zimmerman, in *Archiv. fur Expt. Pathol.;* A. Bertholet, in *Archives der Heilkunde;* Dr. F. Webber, Dr. Julius Steinitz, Dr. R. Buch and Dr. H. Schulz, in the *Allgemeine Med. Central Zeitung;* Dr. Butt, *Centralblatt fur die Med. Wissenschaften;* Dr. S. Wolffberg, Dr. Fischer, Dr. A. Heller, and Dr. Pel, in *Deutches Archiv. fur Klin. Med.*

ACUTE RHEUMATISM TREATED BY SALICIN.—Dr. T. MacLagan (*London Lancet*) reports eight carefully observed cases of rheumatism treated by salicin. From these he concludes:

1. We have in salicin a valuable remedy in the the treatment of acute rheumatism.
2. The more acute the case, the more marked the benefit produced.
3. In acute cases, its beneficial action is generally apparent within twenty-four—always within forty-eight—hours of its administration in sufficient dose.
4. Given thus at the commencement of the attack, it seems sometimes to arrest the course of the malady as effectively as quinine cures an ague, or ipecacuanha a dysentery.
5. The relief of pain is always one of the earliest effects produced.
6. In acute cases, relief of pain and a fall of temperature generally occur simultaneously.
7. In sub-acute cases, the pain is sometimes decidedly relieved before the temperature begins to fall. This is especially the case when, as is frequently observed in those of nervous temperament, the pain is proportionally greater than the abnormal rise of temperature.
8. In chronic rheumatism, salicin sometimes does good where other remedies fail, but it also sometimes fails where others do good.

SALICYLIC ACID AS A PROPHYLACTIC IN CHOLERA INFANTUM.—Jacusiel (*Berlin Klin. Wochenschrift—N. Y. Medical Journal*, December, 1875), uses salicylic acid as a prophylactic in gastro-intestinal catarrh. He adds to the daily allowance of milk two tablespoonfuls of a one-third per cent solution of the acid. Children thus fed entirely escaped the disease, while others were attacked, though existing under otherwise similar circumstances.

INFANT MORTALITY IN MICHIGAN.—Dr. H. B. Baker, in a paper read to the American Public Health Association, shows that the proportion of all infants born alive in the State who survived until their first birthday is about eighty-four per cent of males, and eighty-six and one-half of females, including still births. The percentage of those who survived to their fifth birthday are seventy-three and one-third males, and seventy-seven and two-thirds females, including still-births. The causes of death are in the order named: Scarlet fever, diarrhea, cholera infantum, pneumonia, and dysentery. The deaths reported of children aged under five years for the year 1873 from these diseases was as follows: Scarlet fever, 361; diarrhea, 326; cholera infantum, 302; pneumonia, 258; dysentery, 252.

POISONOUS PROPERTIES OF A SERIES OF ALCOHOLS.—M. Andigé (*La France Medicale—Medical Times*, September 11, 1875) reports the results of a series of experiments on some of the alcohols produced by fermentation, including ethylic, propylic, butylic and amylic alcohol:

1. The toxic properties of this series follows mathematically their atomic composition. Whenever the latter is represented by high numbers, the poisonous action is marked, and this is the case whether the alcohol has been introduced through the skin or by the stomach.
2. For the same alcohol the toxic effect is greater when it has been given by the stomach than when it has been administered through the skin. In the latter case the dilution of the alcohol augments its action.
3. The phenomena observed appear to be the same in general, except in the degree of intensity, whichever alcohol be employed.

The lesions produced also follow an increasing order from ethylic to amylic alcohol. The disturbances of the intestinal mucous membrane are all as intense when the alcohol has been given hypodermically, as when it was given by the mouth. With the same alcohol pulmonary congestion and apoplexy were more frequent when it had been given by the stomach.

PATHOLOGICAL ANATOMY IN A CASE OF PROLONGED AND HABITUAL CONSTIPATION.—On page 692, Vol. 9, of this journal, we gave an abstract from *American Journal Medical Sciences* of a remarkable case, as follows: "A man, aged twenty-six, has been constipated since he was two years old. It began after an obstinate chronic diarrhea. For a long time he has been under careful observation by capable medical men. The longest interval between his fœcal discharges was *eight months and sixteen days.* The process of defecation lasts from two to four days. The dejections look like brown paper chewed. The weight of the fæcal matter at one evacuation was forty pounds. He is a farm laborer, and does considerable work. Other cases collected by the editor exhibit constipation continued for seventy-six days, fifteen weeks, seven months, eight months, and nine months."

From *Chicago Medical Journal*, May, 1876, we learn the following interesting facts respecting this case: He died January 22, 1876, from the exhausting effect of pain during an evacuation. At post-mortem examination the colon in its entire length presented nearly a smooth surface, with but slight evidence of the longitudinal and circular bands that characterize it in its normal state. It extended into the thorax at least four inches above its natural position, crowding the heart and lungs up before it to a transverse line one inch above the nipples. In an undistended state its circumference was thirteen inches. Its calibre was largest near its termination in the rectum. The muscular wall of the rectum was thickened to at least three-sixteenths of an inch—in fact the entire rectum was thickened or hypertrophied and unyielding. A hard ball of foecal matter was found in the rectum about one inch in diameter. During life his evacuations were never preceded by hardened feces, but were always thin. The liver was nearly double the natural size, spleen enlarged, heart small, stomach natural, kidneys small and lungs greatly compressed. In view of these facts, this extraordinary constipation was due to the rectal inflammation which occurred when he was about two years old.

METTAUR'S APERIENT SOLUTION.—Dr. H. Corson (Trans. Penn. State Society, 1875) strongly recommends the following: ℞. aloes socot ʒ ii. ss; super. carb. sod. ʒ vi; water Oiv; spts. lavand. co. f. ℥ ii. After digesting for fourteen days, the clear liquid may be decanted. Age greatly improves the power and taste of the aperient. Dose: teaspoonful after dinner and supper as needed. This aperient is applicable to nearly every variety of constipation, with the single exception of that distinguished by an alkalescent state of the stomach. Practically as well as theoretically, this combination is efficient, and were it not for its bitter taste, would be applicable to a vast number of cases, in which an aperient is indicated.

DIPHTHERIA SUCCESSFULLY TREATED.—Dr. E. Chenery (*Bost. Med. Jour.*, June 8, 1876) gives a somewhat detailed account of his experience in treating diphtheria by the hyposulphite of soda. Nearly every case thus treated recovered, while similar cases, treated in other ways, died. The dose used was from five to fifteen grains every two to four hours. The larger the dose the better, so long as it does not physic. Of course the patients are well fed, etc.

CHRONIC DYSENTERY—CURED BY TOPICAL TREATMENT.—Dr. T. G. Thomas (*N. Y. Med. Jour.*, Jan., 1876) reports a case of chronic dysentery of five years' standing cured by three applications of nitric acid to the ulcerated rectum. The patient was anæsthetized—placed in the left lateral position, and after stretching of the sphincter ani by the finger, a long duck-bill speculum was introduced. This was held by the nurse, exactly as in vaginal examinations, while by a depressor the anterior rectal wall was pressed downwards. The whole rectal canal was now exposed, to the sigmoid flexure. By a syringe it was cleansed of all fæcal matters. Throughout its whole extent the exposed intestine was seen swollen, œdematous, hanging in hæmorrhoidal masses studded with deep ulcers, having grayish bottoms. It was greatly engorged and presented that deep red, almost violet hue, which is seen in the throat in cases of diphtheria. By cotton on a rod, nitric acid was lightly applied to the ulcers and swollen mucous membrane. After the third application, within a period of one month the patient was entirely well.

DIPHTHERIA OF THE INTESTINE.—A. Rajawsky (*Centralblatt fur die Med. Wissenschaften—Medical Times*, December 25, 1875), from observations of diphtheritic processes of the human intestine, concludes:

1. Diphtheria of the intestine is always preceded by a catarrhal affection.
2. The commencement of diphtheria is characterized by a deposit of a fibrinous exudation, which collects in the mucous membrane and on its surface.
3. This is followed by death of the tissue of the mucous membrane, and its metamorphosis into a granular mass containing albumen. This destructive process extends, and at the same time a hyaline metamorphosis of the blood vessels appears in the altered tissues.
4. Micrococci and bacteria are found both in the altered and in the unaltered tissue, in the former in colonies, in the latter dispersed singly. Even at a time when the tissue has not not become fluid, canals filled with bacteria can be found in the sub-mucous layer. Experiments made upon

rabbits show that diphtheria of the intestine can be artificially induced by injection of fluids containing bacteria into the blood only after the intestinal mucous membrane has undergone changes of an inflammatory character.

TYPHOID FEVER FROM INFECTED MILK.—Dr. Lübe (*Centralblatt fur die Medicin—Brit. Med. Jour.*, March 25, 1876) reports an outbreak of typhoid fever traced to the use of infected milk. The epidemic occurred in 1874 in the little town of Plön, commencing August 21st and ending Sept. 24th, and attacking twenty persons. The disease appeared in different parts of the town, although the situation, soil and water supply were different. Of the twenty-four patients, twenty-one had drank raw milk obtained from the same dairy farm, at which was a dung-heap in the neighborhood of a well, the water of which was found by chemical and microscopic examination to be strongly charged with organic matter. The water had been used for cleansing the milk vessels. Four of the cases occurred on the farm itself. After the milk had been stopped, only two more cases occurred.

SOME FORMS OF DYSPEPSIA.—Dr. F. Delafield (*Amer. Clinical Lectures*, Vol. 2, No. iv.), under the above title, gives some valuable suggestions: (1). Dyspepsia confined to the stomach has the following symptoms, viz.: attacks of pain and vomiting, coming at first at long and then at short intervals—the attack always excited by the ingestion of food and the pain ceasing when the stomach is emptied. The disease lasts for years, and steadily grows worse. Medical treatment alleviates the symptoms for longer or shorter intervals, but never permanently.

The most rational and effectual treatment of these cases is the systematic use of the stomach-pump. The pump, as a rule, is not to be used till three hours after a meal of solid food. The patient soon learns to use the pump at home. (2). Dyspepsia due to functional derangement of the small intestine, the stomach being unaffected. Symptoms—pain is the most troublesome and may be referred to any part of the abdominal cavity. It is usually described as a constant dull pain—has no special relation to the ingestion of food or its quality. It occurs when the stomach is full or empty—whether the food is spare and simple or abundant and rich. The use of liquor will usually stop it for a short time. There may be some particular time of the day at which the pain comes on with tolerable regularity. There may be nausea, but not vomiting. Appetite is often good and food causes no distress. Some cases are easily relieved by treatment; others prove obstinate. Drugs indicated are, cubebs, ipecac, and assafœtida. Horseback riding is often of great service.

(3). Dyspepsia from disordered functions of the liver. Clinically these cases can be divided into two classes: (*a*). Those of florid complexion and of well-developed adipose and muscular tissues. (*b*). Those of pallid complexion, spare figure and feeble muscles. In the first class the symptoms are due to derangement of those functions of the liver which should effect the destructive metamorphosis of albuminoid substances, so that patients receive a full supply of the nutritious portions of the food, but do not get rid of the excrementitious. In the second class, the functions which should assimilate the fat and peptones are so disordered that the patient is imperfectly nourished. In one case the tissues are overmanured, but badly drained; in the other, they are well enough drained but not manured at all.

Symptoms of the first class of cases are—depression of spirits, liability to attacks of vertigo, bowels more or less irregular, urine apt to contain an excess of uric acid or of the urates, partial loss of memory, an inability to apply the mind to business. Treatment—an entire abstinence from every kind of alcoholic drink; also from tobacco; vigorous outdoor muscular exercise; drugs as indicated.

Symptoms of the second class of cases—flatulence, headache, curious nervous feelings in various parts of the body, sleeplessness, hypochondria often, irregular action of the heart, pain in the precordial region and a dull pain in the right hypochondriac region, extending to the back and shoulder, constipation, emaciation, urine normal usually. Treatment of this condition is different. Diet must be carefully regulated—full and nutritious; wines, etc., are often of service; cream and cod-liver oil are sometimes indicated; constipation must be relieved, nervous symptoms allayed, appetite improved by the mineral acids, exercising in the open air, bathing the entire body daily in cold water.

PHYSIOLOGICAL ACTION OF REMEDIES.

SQUILLS.—Dr. Th. Husemann (*Deutsche Med. Woch.—Jour. Nerv. Diseases*, April, 1876) in an elaborate article concludes:

1. The extract of squills, prepared according to the directions of the German pharmacopœia, is a very constant preparation in its action on the animal organism.
2. It affects the innervation of the heart and the cardiac muscle in a very similar manner as do digitalin, digitalein, helleborein, antiarrin, thevetin and all those glycosides which are known as cardiac poisons.
3. The diuretic action of this extract can be explained only by the increase of blood pressure connected with its effect as a cardiac poison; it acts in no other way, and produces neither a local irritant action on the urinary passages, nor does it have an eliminant effect from irritation of the kidneys.
4. The indications and contra-indications of extract of squills as a remedy in dropsy are apparently not different from those of digitalis.
5. It does not have an expectorant effect by any eliminant action on the bronchial nervous membrane.
6. It is also not an anti-pyretic; it rather, in large or small doses, causes a constant increase of temperature.
7. The commercial scillitin, on account of the uncertainty of its action, which prevents an accurate judgment of the dose, cannot be recommended as a substitute for the extract.

STRYCHNIA—ACTION ON THE EYE.—Dr. Hippel (*Gazett. Med. Ital. Lomb.—Doctor,* May, 1876) says that strychnia, given in doses of two to four milligrammes, produces the following effects on the eye:

1. Increased peripheric sensibility for blue.
2. Temporary increase of visual power.
3. More distinct perception of peripheric points.
4. Lasting enlargement of the field of vision.

He believes that the effect on the optic nerve is the same as that attributed to continuous electric currents on other nerves.

COCA—EFFECTS OF ITS LEAVES.—Sir Robert Christison (*British Med. Jour.*, April 29, 1876) gives the following description of this drug and its physiological effects: In fine qualities the leaves of "erythroxylon coca" are mostly unbroken, often folded, but many of them, too, spread out, never curled, but always flattened, never brown, always deep green on their upper and gray-green on their under surface, and uniform in that respect, seldom mottled in color. They are thin and crisp, beautifully reticulated and traversed longitudinally by a single fine vein on each side of the strong midrib. In mass they have a strong odor resembling that of tea, and when chewed they have a well marked herbaceous taste, not disagreeable, followed, after a continuous chewing for some minutes, by a gentle, pleasant sense of warmth in the mouth. Inferior specimens, besides differing in appearance from these, have a fainter odor, and do not occasion warmth in the mouth when chewed. Chemical analysis has found a crystalline principle in coca, and given it the name of cocaine. From numerous experiments upon himself and others, given in full detail, he concludes that the chewing of coca removes extreme fatigue and prevents it. Hunger and thirst are suspended, but eventually appetite and digestion are unaffected. No injury whatever is sustained at the time or subsequently in occasional trials; but I can say nothing of what may or may not hpppen if it be used habitually. From sixty to ninety grains are sufficient for one trial, but some persons either require more or are constitutionally proof against its restorative action. It has no effect on the mental faculties, so far as my own trials and other observations go, except liberating them from the dullness and drowsiness which follow great bodily fatigue. As to the several functions, it reduces the effect of severe protracted exercise in accelerating the pulse. It increases the saliva, which, however, may be no more than the effect of mastication. It does not diminish the perspiration. It probably lessens the hourly secretion of urine solids.

Gelsemium Sempervirens—Its Physiological and Therapeutical Action.—Berger (*Central. fur die Med. Wissen.—Med. Times*, January 22, 1876) from personal observations says: When given to cold-blooded animals, gelsemium causes cessation of motion and paralysis of the motor centers of the brain, paralysis of the function of respiration and increase, followed by depression, of the reflex action of the spinal cord. The excitability of the peripheral motor nerve, and also that of the muscles, is diminished, together with the frequency of the heart's action. The administration of the same drug to warm-blooded animals causes paralysis of the motor centers of the brain, which is preceded by a stage of excitement and paralysis of the respiratory center in the medulla oblongata. Sensibility remains unimpaired, while reflex irritability is at first increased and finally diminished. Its influence upon the heart's action is not very marked, the slight diminution in the frequency of the pulse appearing to be due to the irritation of the center for the vagus in the medulla by the imperfectly ærated blood. Large doses cause a moderate diminution of the blood pressure, and when death occurs it is always due to paralysis of the respiratory function. In order to form an opinion as to its therapeutic worth, gelsemium was given to many patients suffering with neuralgic affections of peripheral and central origin. In all these cases the results obtained were in the highest degree unsatisfactory, and it must not be forgotten that the instances of fatal poisoning on record stand in marked contrast to the slight narcotic action of the drug.

Differences between the Anæsthesia of Ether and Chloroform.—Prof. Schiff (*Brit. Med. Jour.*, May 22, 1875) relates the results of more than five thousand experiments on the differences between ether and chloroform anæsthesia. With both paralysis of conscious sensation, paralysis of the movement of voluntary muscles, paralysis of respiration, circulation, and, finally, paralysis of the heart and the vaso-motor nerves occurs. Respiratory paralysis is produced by ether when circulation and blood pressure remains within the limits compatible with life. Sometimes the vascular pressure increases, sometimes it decreases, but is always sufficiently high to allow the exchange of the carbonic acid gas with the oxygen of the atmosphere. Vascular succeeds respiratory paralysis when ether is administered. The reverse takes place with chloroform. Frequently an amount of this anæsthetic agent which would not be sufficient to produce respiratory may suffice to bring on vascular paralysis. Under these conditions, and when vascular paralysis lasts under thirty seconds, artificial respiration is useless, because there is no longer any exchange of gases, the blood pressure being diminished. The cessation of respiration, therefore, is not the most dangerous moment to animal life when etherization is employed, whilst it may be so with chloroformization, because sometimes it is possible to produce some automatic respiratory movements, but, nevertheless, respiration ceases immediately and the animal dies. With etherization, on the contrary, when some automatic inspirations are obtained, it may be taken as certain that respiration will continue, and that the animal will live. Schiff affirms that in the present state of our science there are no means which will show us how to recognize, so as to prevent them, the tendencies which may cause death in some animals after the first inhalations of chloroform before having produced true anæsthesia. The reverse occurs with ether, so that it may be said that, in the present state of knowledge, the surgeon is responsible for the death of the individual by etherization, whilst he is not responsible when death occurs from chloroformization. From these facts Schiff concludes:

1. The phenomena relating to the paralysis of sensibility and movement are common to both ether and chloroform.
2. The two other orders of phenomena—that is to say, those relating to vascular and respiratory paralysis—often show themselves in inverse order with reference to these two agents.
3. With chloroform, however, either the one or the other of these two paralyses may first show itself, involving great danger to the animal if the vascular phenomena be the first to make their appearance. Therefore the use of chloroform should be rejected and ether only used.

OBSTETRICS.

PLACENTA PRÆVIA—ITS FREQUENCY, MORTALITY AND CAUSATION.—Dr. Robert Grieve (*Glasgow Med. Jour.*, April, 1876) reports in detail six cases personally observed. These six occurred in an aggregate of 4,270, or on an average of one in 711. Of the mothers, one in three died; of the children, 83⅓ per cent. Respecting treatment, he recommends delivery at the earliest possible moment. Of all the cases, not one was a primipara, the fifth labor being the lowest and the eighth the highest. None were young, three being above thirty and three above forty. All were poor and overworked; all were physically weak, lived in a bad atmosphere and were ill-nourished.

STERILITY OF WOMEN CAUSED BY DISEASE OF THE SEXUAL APPARATUS.—O. Von Grunewald (*Arch. f. Gynak.—Amer. Jour. Obst.*, June, 1876) believes the almost unique cause of sterility to be disease of the tissues of the uterus, incapacitating it for nourishment of the ovum. Among 900 married women suffering from disease of the uterus, and not past the menopause, fifty were sterile, and in over fifty per cent the disease consisted in an inflammatory affection. It is well known that pregnancy may be interrupted by acute diseases—it is probable that chronic general debility impairs the developmental powers of the ovum. In endo-metritis the cervical canal is generally wider than usual; menstruation is not disturbed; the secretions are little dangerous to the spermatozoa—as, for instance, in carcinoma uteri—yet the disease leads to sterility as soon as the greater portion of the mucous membrane of the corpus uteri is affected. Meso-metritis obstructs the nutrition of the ovum in proportion to the mass of tissue involved. To para and peri-metritis and frequent complications of other inflammatory forms may be attributed at least ten per cent of the sterile women. They occasion disturbance alike of the nutrition of the organ and its position, beginning often in the first weeks of marriage, and having frequent accessions. Stenosis of external os never exists idiopathically, but remains from former inflammatory processes, the same as conoid cervix, and these only occasion sterility. Slitting heals the vice of nutrition, and thereby (but seldom) the sterility also. Malformations of the cervix always develop themselves through previous catarrhal or inflammatory impressions. Inasmuch as the disturbing influence of these diseases is most felt when the greatest claims are being made upon the uterine mucous membrane for attachment and nutrition of the ovum, so it is found that then, *i. e.*, in the third and fourth months, the most abortions occur, and may easily become habitual.

PUERPERAL FEVER — IS IT GENERALLY SPREAD BY THE MEDICAL ATTENDANT?—This is a question of far-reaching import. Dr. F. Churchill (*Brit. Med. Jour.*, March 25, 1876) presents the following facts:

1. We know that a person going directly from a post-mortem examination to a lying-in case may excite puerperal fever in that patient. Surely this opportunity for mischief is of very infrequent occurrence.
2. We know that medical men attending cases of erysipelas have excited puerperal fever from attending lying-in women at the same time, especially if due precautions had not been taken.
3. We know that nurses going from attending on puerperal fever to lying-in women have conveyed the disease.
4. We also know that in some cases the disease has followed in the track of some particular doctor, and this in spite of minute and thorough precautions. There is no explanation of such cases, and they rather show the failure of quarantine.
5. In the course of forty years of practice I have had puerperal fever cases, but the most rigid inquiry has failed to show me any connection between any two patients. My precautions were, (*a*) Never to attend a confinement in the clothes I had worn at my visits. (*b*) I always saw recently confined patients before seeing the fever cases, and on returning home always changed my clothes. (*c*) I was scrupulously careful about the frequent and thorough washing of my hands before leaving the patient's house. These precautions were certainly successful with me.
6. If the ordinary attendant is to be put in quarantine, what about the consultant? Is he not as likely to carry the infection? The doctor hopes that before the portability of the disease is assumed, some effort will be made to collate examples to show how often, notwithstanding due precautions, the sequence of the disease proves it to have been conveyed from one patient to another by a third person. If well authenticated cases of this kind be numerous, then puerperal fever is more infectious than typhus, scarlatina or even plague,—and the doctors must go into quarantine. If not, neither the profession nor the public need be alarmed, and with proper precautions the doctors may pursue their avocations in peace and security.

RETAINED PLACENTA AFTER ABORTION.—Dr. H. Spondly (*Lond. Med. Record*, April 15, 1876) from his personal observations concludes:

1. One cannot depend upon the placenta being always spontaneously expelled with the fœtus, and adhesions are unfrequent.
2. A retarded delivery of the placenta is always accompanied with considerable danger, especially from repeated floodings, which in the most favorable circumstances delay convalescence.
3. It is strongly to be recommended to remove the placenta with the fingers in the early stages, when the cervix is dilated sufficiently to admit at least one finger.
4. Injections of carbolic acid, diluted in warm water, should be used

to remove portions of placenta which may be left in utero. These retained portions are much more frequent in ordinary abortions than with this operation.

5. Care should be taken to use no force to enter the uterus when it is closed without previous dilatation.

6. Midwives should be instructed to send for medical help whenever the ovum is incompletely expelled, as then the uterus as a rule would be found permeable.

PROLAPSE OF THE ARM IN TRANSVERSE PRESENTATIONS.—Dr. Frank P. Foster (*Amer. Jour. Obstet.*, June, 1876) gives the tenable doctrines on this subject as follows:

Mere prolapse of an arm does not of itself indicate with certainty that the presentation is transverse. Inspection of the prolapsed hand will, in ordinary cases, roughly indicate the child's position, but should be supplemented by other means of diagnosis, and may, in presentations of the back or abdomen, or if the upper arm alone be prolapsed, give faulty indications, if conclusions be drawn in accordance with the rules commonly laid down. Death of the child cannot be positively known from the condition of the arm, but muscular movements in the limb show that the child is still living. Prolapse of the arm may cause the presentation to become transverse in cases which might otherwise end in a head presentation. A prolapsed arm constitutes more or less an impediment to cephalic version, spontaneous or artificial, but yet traction on the prolapsed arm may, in certain cases, favor cephalic version, but is not to be recommended for that purpose unless, preceded by displacement. The prolapsed arm does not always, even when pulled upon, materially hinder spontaneous version by the feet. Prolapse of an arm does not facilitate the old operation of podalic version, but it offers the best means of avoiding the necessity of liberation of the arms, or at least of one arm, during extraction, and thus, by hastening delivery, increases the chances of the child being born alive. The arm may materially interfere with the introduction of the hand into the vagina through the os uteri. On the whole, prolapse of the arm is of advantage in transverse presentations. The arm should be replaced within the uterus by the immediate method of Credi, provided it can be done easily, in cases in which cephalic version is to be attempted, or in which there is reason to believe that a transverse position of the child is not yet thoroughly established. Replacement is not called for under any circumstances, and should never be done by force. Retropulsion may prove of service in combined external and internal podalic version. Traction should not be made upon the arm until the diagnosis is established. Lateral traction in utero, after the arm has been replaced, may assist in performing cephalic version. Traction may be used to complete spontaneous evolution. Traction, particularly if the shoulder be not deeply engaged, or if the force be applied to the upper arm, may cause the child to rotate to a certain extent on its long axis, and perhaps render it sufficiently movable to allow of version. Traction is of manifest advantage in rendering the neck and trunk accessible, and thus facilitating decapitation or evisceration, and after either of these operations, it materially assists in delivery. A fillet should be applied to the wrist, provided it can be easily done, in case the old operation of podalic version be chosen. This affords a means of preventing the arm from rising by the side of the head during extraction by making traction on the arm after its retreat within the uterus. The fillet should not be applied within the uterus. Amputation should never be performed, unless the child is clearly dead, or embryotomy be necessary, and even then it should be avoided if possible, as it deprives us of a valuable means of traction, and may lead to confusion of the fœtal and maternal parts.

SURGERY.

Penetrating Wounds of Knee Joint.—Dr. A. Gayet (*Lyon Medicale—New York Med. Jour.*, July, 1876) concludes a report of eight cases of the above form of injury as follows:

(1) A penetrating wound of the knee joint, when made by a pointed instrument and without complication, is not dangerous, provided it is allowed to cicatrize in an immovable position.

(2) When left to itself, or improperly treated, arthritis of the most formidable character may result.

(3) The dangers of arthritis are in direct proportion to the extent of the wound and the difficulties which prevent union by first intention.

(4) Complications of the bony structures render the case extremely grave, nevertheless fractures of the patella, if complicated, do not call for amputation or resection.

(5) The presence of foreign bodies, however small, determines arthritis and its consequences, and demands amputation or resection.

(6) Posterior wounds would seem to be more dangerous than anterior wounds, on account of the density and number of the tissues and the presence of vessels, etc.

Torsion—Its Advantages over Ligature in Arresting Hemorrhage.—M. Tillaux, in a lecture at a Paris Hospital (*Brit. Med. Jour.*, May 20, 1876) stated that he had for five years used torsion for all arteries, large or small. He believed that torsion is applicable to all arteries, especially the larger ones. A single pair of forceps is sufficient, and not two pairs, as employed in England and elsewhere. The artery should be seized obliquely and not longitudinally, and in such a manner that the three coats, in their entire breadth, should be included in their grip. The torsion or twisting should then be practiced until the portion seized becomes detached. Torsion is applicable to atheromatous or inflamed arteries as well as arteries in a healthy condition.

Torsion favors union by the first intention, owing to the absence of a foreign body, as in the case of ligatures. Like ligatures, torsion prevents primary hemorrhage, but it acts more effectually in preventing secondary hemorrhage. M. Tillaux asserts that, although he has employed torsion in about a hundred cases of capital operations, he has never had a single case of primary or secondary hemorrhage.

One of the attending surgeons to the Philadelpha hospital has for many years used torsion exclusively with, on the whole, excellent success. He has devised an ingenious apparatus for twisting arteries.

Method of Bandaging the Breast.—Dr. L. A. Dugas (*Louisville Med. Jour.*, April, 1876) says that in treating mammitis or mammary abscess he uses the following method of bandaging: A bit of cotton or linen shirting, about ten inches wide and long enough, is placed about the thorax and secured in front by digitations similar to other "many-tailed" bandages. This is to be applied from the axilla down, passing around the chest and over the mamma, and to be tied in front of the sternum. It effectually compresses both organs, and may be removed, loosened or tightened according to the exigencies of the case, without any difficulty whatever. If only one breast is affected, the bandage may be so split as not to cover the whole of the other. The child may be nursed through an aperture made in the bandage for the nipple. As soon as the congestion becomes painful or threatening, the bandage should be applied with such moderate tightness as will relieve pain, and it should be continued until the trouble has entirely subsided.

Sterility Caused by Fatty Degeneration of Spermatozoa.—Dr. L. Bianchi (*Il Movimentz Med. Chirurg.—Clinic*, April 29, 1876) reports a case illustrating a cause of sterility generally overlooked. A young man of perfect health was married to a woman of good physique. The man had not been addicted to drink or venereal excesses of any sort. Yet they were sterile. On careful examination, it was found that the secretion of the testicles had undergone fatty degeneration. Thus it appears that in a period of apparent vigor, with no apparent affection of the testes there may be complete fatty degeneration of the spermatozoa. Further, this may be a cause of infecundity.

ETIOLOGY OF VESICAL CALCULI. — DeBout d'Estree (*Gaz. des Hop.—Clinic,* June 24, 1876) gives the following causes in 583 cases:

Hereditary predisposition	191
Digestive disorders	160
Excessive nutrition	101
Sedentary life	95
Emotional disturbances	35
Trauma in region of kidney	1

Chemistry and Pharmacy.

EFFECT OF THE PHOSPHATES ON PUTREFACTION.—That phosphate of lime accelerates the putrefaction of nitrogenous substances is a fact capable of demonstration by experiment. The same property has been shown recently by Lefort to belong in a less degree to the phosphate of magnesia, although it is not possessed by the soluble alkaline phosphates, or by other salts of lime and magnesia. Lefort suggests that the very rapid decomposition of fish may be accounted for by the large proportion of earthy phosphates present in the tissues. According to the analyses of Bibra, the ashes of perch and carp contain over 44 per cent of the earthy phosphates, while the flesh of oxen and calves yields only 20.6 and 16.4 per cent respectively. The explanation offered for this property of the phosphates is that they furnish a pabulum for the organisms upon whose development putrefaction depend.

TO REMOVE silver stains from clothing, immerse the stained fabric for a few minutes in a concentrated solution of chloride of copper, then rub with a crystal of sodium hyposulphite, previously dipped into ammonia which has been diluted with an equal bulk of water. If the chloride of copper solution is quite neutral, the color of the fabric will not be affected.

EXAMINATION OF OLIVE OIL.—A simple method of applying the elaidin test for olive oil, according to E. Kopp (*Chem. Centrabl.—Am. Jour. of Pharmacy*), is the following: Ten volumes of the oil and one volume of nitric acid are poured into a test-glass and a few pieces of copper wire added, whereby nitric oxide is evolved, which, reacting with the excess of nitric acid, produces nitrous acid. As soon as the gas bubbles passing through the oil become numerous, the acid and oil are intimately mixed by stirring with a glass rod. After about five minutes the mixture is again made by continuous stirring, and then set aside in a cool place (54° to 59° F.) The oil separates again from the acid with a blue color, from the presence of copper nitrate, but soon begins to congeal, the more rapidly in proportion to the purity of the oil, producing at length a solid mass which is also quite white, if the oil is unadulterated. If other oils are present, the solidification will take place much more slowly, the elaidin will be usually softer, and of a more or less yellowish or brownish color.

PRESERVATION OF INFUSIONS, DECOCTIONS, ETC.—The following simple plan of preserving infusions, syrups, the fresh juice of fruits and other fermentable fluids, has stood the test of experience in the hands of Prof. Almen (Proc. Am. Pharm. Association, 1875). The liquid to be preserved is introduced into a bottle, which it nearly fills. A cork is then introduced, through which passes a glass tube, six cm. long and two to three mm. internal diameter, which is narrowed somewhat at the lower end, and loosely filled with cotton wool. The bottles thus corked are placed in a water bath, and heated to the boiling point of the bath for some time. In this manner the air originally contained in the bottles is completely expelled, and that which enters to fill its place as the bottles become cooled is filtered from ferment germs in passing through the cotton. The cork may be fitted also with a syphon tube, reaching to the bottom of the bottle, and kept closed with a caoutchouc tube and clamp after the air has been expelled, and thus portions of the contents may be removed from time to time without detriment to the remainder. Infusions of rhubarb and of senna were preserved in this method in perfect condition for eighteen months.

Mucilage of Acacia, if prepared with tolu water, instead of simple water, will keep for several months. The tolu water is made by triturating fl. ʒij tinct. tolu with ʒiv carb. magnesium, then with Oij. of water and filtering.

Solution of Phosphorus in Glycerine.—Phosphorus dissolves in alcohol only after prolonged heating, but it is rapidly taken up when agitated with warm glycerine, and the solution may then be diluted with warm alcohol without separation of the phosphorus.

Emulsion of Phosphorated Oil.—Prof. Redwood recommends the following method of exhibiting phosphorus in solution: Take one drachm of phosphorated oil, two drachms of yolk of egg, six drachms of syrup of tolu, and sufficient chloroform water to make five ounces and seven drachms. Make an emulsion, and add one drachm of liquor potassæ. The chloroform is introduced simply to preserve the preparation.

Concentrated Solution of Salicylic Acid.—Perhaps the best formula yet offered for a concentrated solution of salicylic acid, miscible without precipitation with aqueous solutions, is the following, proposed by C. L. Mitchell (*American Journal of Pharmacy*):

Salicylic acid, pure	ʒij.
Borax	ʒj.
Glycerine	q. s.

Mix the borax and acid with half a fluid ounce of glycerine, and heat gently until dissolved, then add glycerine to make up one fluid ounce. This solution can be diluted with water to any extent without immediate precipitation, but if the volume of water reaches more than ten times that of the glycerine the mixture becomes cloudy after a time.

According to Chas. Baker (*American Journal of Pharmacy*, July, 1876) salicylic acid, when heated with twice its weight of olive oil, forms a homogeneous mixture, admirably adapted for application to surfaces. The oil separates to some extent on standing, but can be readily recombined by shaking.

NOTE ON THE ACTIVE CONSTITUENT OF ERGOT OF RYE.—R. Buchheim (*Arch. Pharm.*) finds, as the result of his researches, that the active constituent of ergot is a body closely resembling animal gelatin. Being easily soluble in cold water, it is contained in the cold infusion of ergot. It is formed by the action of the mycelium of a fungus upon the gluten of the rye, the decomposition being analogous to that which albumen undergoes in the process of putrefaction. The products in the end are identical in both cases, and the author thinks it probable that putrid blood, etc., may be made to yield a substance having properties similar to those of ergotin.

CACHETS DE PAIN.—To some of our readers it may be necessary to explain the term which forms the heading of this article. The " cachets " are simply small discs of the same material used for the old fashioned and familiar wafers that have been long used for enveloping bitter or nauseous medicines. These discs are of various sizes, from ¾ in. to 1¼ in. in diameter, concave in the centre. The mode of using them may be inferred from the following practical notes on the subject by Mr. W. M. Rice (*American Journal of Pharmacy*, May, 1876):

One objection to the use of the cachets has been hitherto the cost of the press that is furnished to facilitate their preparation. A substitute, proposed by Mr. Rice, is thus described: " A piece of hard wood, six or eight inches long by four inches wide, serves for the base of the machine. In this fasten, for the lower dies of the press, some of the brass buttons used for stair rods, which may be had of exactly the right sizes for the different sizes of cachets. These should be sunk in the wood so as to be just level with its surface. Similar dies are to be screwed to wooden handles, and the machine is complete."

To use it, all that is necessary is to place an empty wafer on the die, place the medicine on it, cover it with another wafer, properly moistened, apply to this with moderate pressure the upper die, and the thing is done.

For moistening the cachets, all that is needed is a piece of flannel or muslin, wet and wrung out, and folded two or three times. Several of the discs may be laid on this damp surface at once, and will absorb sufficient moisture to make them adhesive, without becoming too much softened.

The cachets certainly enable us to administer bulky doses of medicine, especially powders, such as quinine, in such a way as not to offend the most fastidious palate. They ought to be more generally known and used than they are, for, in this day of elegant pharmacy, the physician is without excuse who allows his patients to associate the idea of medicine with what is bitter and disagreeable, if not positively disgusting.

Editorial.

Original Articles, Reports of Medical ocieties, Observations, Correspondence, News, etc., of general interest, are respectfully solicited from every source. Articles should be practical and carefully prepared.

The Editors will not be responsible for statements made over the names of contributors.

MEDICAL COLLEGE CONVENTION.

In our last issue we published a full abstract of the first meeting of this convention. Nearly every other medical journal did likewise. Not a few commented upon the matter laid before them. In this way for good or ill the work of the convention is fairly before the American medical profession.

The criticisms have (as is usual) been of every character. All journals represented in the convention speak well of it, while most who were not present regard it as a failure and exultingly exclaim: "I told you so."

It strikes us that these criticisms pretty generally forget one thing, viz.: a college association must be organized before it can proceed to lay down authoritative law for itself or any other colleges. Now, the great aim of the convention was to plan for the organization of a permanent college association. Those who study the abstract referred to will observe that all else was subordinated to its main object. To form an organization of colleges several things are necessary. (1). The colleges must come to know each other better. This is difficult of accomplishment, because of their geographical separation—from Atlantic to the Pacific, and from the great lakes to the gulf of Mexico—because of the different degrees of prosperity that are found in the different States and cities, and because of the different habits and customs of these widely separated people. Some colleges are bound by charters—some by State and other laws under which they were organized—some by boards of trustees—some colleges are strong in certain points and weak in other points; others the reverse. Some can change rapidly—others but slowly. The hours of earnest labor during the sessions of the convention demonstrated the fact that there was an unwritten phase of medical education, and that it was wisdom to hasten slowly. Certain colleges smarted under particular abuses—other colleges under very different ones. All, however, consented to bear and forbear still longer in order that there might be formed a permanent association, to include the majority of the American medical colleges. We are sure that each college represented in the convention will do better work this year because of the knowledge gained from other colleges during the few hours of meeting. The process of studying each other thus begun, we trust will go on increasingly each year.

(2). On the basis of mutual knowledge of each other's aims, resources, needs, etc., it is necessary that certain ethical rules, educational standards, etc., be wisely drawn up. A competent committee have this matter in hand, and will doubtless soon present to the faculties of the various colleges a succinct statement of such rules and standards as they may deem best adapted to govern a permanent college association. At the meeting in Chicago next year we hope to see representatives from at least forty medical colleges discuss this statement and fully organize anew for the future.

But, one says, all this will not introduce a medical millenium into the United States by April 1, 1877. Very true—medical equally with all other milleniums are, we fear, a long way off. We think that many expected too much from such an association, as they do from the American Medical Association. Associations, like men or trees, must grow—they cannot leap into the full vigor of manhood in a single day. But, did the convention do nothing else than stimulate the mutual acquaintance of the colleges represented and lay the foundation for a strong and permanent association? Yes, they discussed certain vexed questions and expressed their opinions in certain resolutions. But, one says, these are worthless, because the colleges are not bound to strictly observe them. True, they are not bound by a promethean chain, but few colleges will neglect a consideration of these opinions, and very many will guide their action by them. Should forty colleges confirm these opinions, they would constitute a written law binding upon all colleges.

The spirit of the convention was admirable, and if continued in future meetings, the "Association of American Medical Colleges" will abide so long as the colleges exist. Individual self-sacrifice for the common good was the one thing lacking in those former conventions which failed to perpetuate themselves. Apparently the colleges are so strongly impressed with their need of mutual aid as to be ready to make the needed individual self-sacrifice.

MEMORANDA.

Sixty-five hundred medical students were this year registered at the University of France.

The discoverer of bromine—the famous chemist M. Jerome Ballard—died recently aged 73.

The prize medal at the Chilian world's fair was given to Wm. R. Warner & Co. for their sugar-coated pills.

Dr. E. L. Holmes (*Chicago Med. Jour.*, May, 1876,) reports a case of death from ether during a cataract extraction.

Dr. Geo. Cook, medical superintendent of Brigham Hall, Canandaigua, N. Y., was killed by an insane patient June 12, 1876.

Dr. H. B. Baker estimates the death rate for Lansing, Mich., at annual rate in 10,000 inhabitants, for April 7.10, May 10.94, June 4.22.

Prof. Carson has resigned the chair of materia medica and therapeutics in the University of Pennsylvania. Dr. H. C. Wood succeeds him.

Dr. F. K. Bailey, of Knoxville, Tenn., died June 17, 1876, aged 60. Another worker gone from the profession. Hundreds will miss his thoughtful contributions to various medical journals.

Dr. Geo. H. Napheys died July 1, by a narcotic administered by himself—cause, a profound melancholia. He is well known, especially by his works, "The Physical Life of Woman," "Modern Therapeutics."

The College of Physicians and Surgeons of New York, have discontinued the five series of lectures on special subjects hitherto delivered during the winter season. The hours have been given to the chair on practice of medicine and pathology.

The proprietor of a private lunatic asylum at Musselburgh, Scotland, made some astonishing statements at a late trial. Men, to escape paying damages for breach of promise, went into asylums. Business men went in to avoid bankruptcy court, and ministers to avoid trial by their presbyteries.

At the late meeting of the Maine Medical Association (*Boston Med. Jour.*, July 13, 1876), Dr. Sanger of Bangor, introduced a series of resolutions embodying the principles adopted by the American Medical Association and the Michigan State Association in relation to the University of Michigan, which were unanimously passed.

Dr. F. W. Draper has resigned his position as assistant editor of *Boston Med. and Surg. Jour.* Dr. A. S. Mason succeeds him. Dr. W. B. Hazard has resigned the editorship of *St. Louis Clinical Record,* and Dr. W. A. Hardaway succeeds him. Dr. Whittaker has resigned the editorship of the *Clinic* and is succeeded by Dr. Longworth. Dr. Aveling has resigned the editorship of *London Obstet. Jour.* and Dr. Galahin succeeds him.

We have received the first issue of a new surgical journal, viz., "*Archives of Clinical Surgery,*" edited by Dr. E. J. Bermingham and published in New York by Rutledge & Co. It is a monthly of 44 pages, printed on good paper at four dollars per year. The number before us contains seven short articles and clinical reports from six hospitals. It is carefully edited and will doubtless be handsomely supported by surgeons.

The *Medical and Surgical Reporter* (June 24, 1876) gives an excellent editorial upon "Exclusive Dogmas." The writer thinks that the action of the Michigan State Society and that of the Pennsylvania State Society (*vide* last issue of REVIEW), were inspired *only* by the conviction "that to state as a dogma to be received with unquestioning faith, that which, if true, could only be a generalization from a limited number of facts, is so contrary to the methods of science that it must necessarily paralyze investigation and check the advance of discovery." The question at issue in the above discussion in Michigan University he states thus: "Does the present constitution of the Ann Arbor faculty tend to the real or implied recognition by that school, as such, of the homeopathic dogma?"

The board of regents of Michigan University have appointed F. G. Rockwell lecturer on *Obstetrical Therapeutics*, and J. G. Gilchrist lecturer on *Surgical Therapeutics*. Salary of each $900 per year. Profs. E. S. Dunster and Donald McLean still teach the homeopathic class the remaining portions of obstetrics and surgery. The entire list of teachers and examiners in the homeopathic college at Ann Arbor, corrected to date, is as follows: Profs. S. H. Douglas, C. L. Ford, A. B. Prescott, Geo. E. Frothingham, Donald McLean, E. S. Dunster, J. W. Langley, Will J. Hardman, Jones (homeo.), Morgan (homeo.), F. A. Rockwell (homeo.), J. G. Gilchrist (homeo). Profs. Dunster and Rockwell are special partners in teaching obstetrics to the homeopathic students, while Profs. McLean and Gilchrist perform a similar function to the same students respecting surgery.

Dr. L. Brandeis (*Sanitarian*, May, 1876) gives the following explanation of the Kentucky shower of flesh. The matter is the "nostoc" of the old alchemist. The nostoc belongs to the confervæ; it consists of translucent, gelatinous bodies joined together by thread-like tubes or seed bearers. There are about fifty species of this singular plant classified. The nostoc propagates by self-division as well as by seeds or spores. When these spores work their way out of the gelatinous envelope they may be wafted by the winds here and there and they may be carried great distances. Wherever they fall and find congenial soil, viz., dampness or recent rain, they will thrive and spread very rapidly, and many cases are recorded where they have covered miles of ground in a very few hours with long strings of nostoc. The Kentucky nostoc was flesh colored, with a flavor approaching that of a frog or spring chicken.

S. A. Jones, dean of the Homeopathic Medical College of Michigan University (*Detroit Tribune*), answers certain statements made by the regular faculty in May number of *Richmond and Louisville Journal*, and elsewhere: (1.) Their small class was due to a variety of causes, but it was composed of students and gentlemen—in contrast of the "regular class—whose lawlessness necessitated the presence of the Ann Arbor police in their college for nearly half of the term." (2.) "Six of the homeopathic class are declared to have been 'candidates for graduation,' and to have slunk away from the ordeal of an examination. This is an unqualified falsehood." (3.) "The homeopaths do not desire a complete faculty of their own." Therapeutics and practice of medicine constitute all the branches desired by them. Let anatomy, physiology, chemistry, mechanical and operative surgery, obstetrics and gynæcology, etc., be taught to the homeopathic students by the regular faculty. Speaking of the campaign document distributed by the regular faculty at the meeting of the State Society, he remarks: "That any faculty of the University of Michigan should be obliged to tender an apology to a State medical society for having discharged its simple duty to the State, is an instance of debasing subserviency; but that the apology itself should *necessitate* a tissue of absolute falsehoods, is a disgrace."

Book Notices.

Any book noticed herein may be had of E. B. Smith & Co., Publishers and Booksellers, Detroit, Mich.

LECTURES ON ORTHOPEDIC SURGERY AND DISEASES OF THE JOINTS. By Lewis A. Sayre, M. D. 1876. New York: D. Appleton & Co.

The names of persons have not the same significance as in former ages, when inherited blood was more valued. Still a name does have a meaning, and indicates some fact or facts respecting its possessor. Now, in some sense, the title page of a book is its name. The most noticeable feature of that before us is the list of titles appended to the author's name. The list numbers fifteen, and terminates with etc., etc. These may run it up to a score or more; if so, it was wise to omit further detail, as the page could scarcely have contained them, though printed in the smallest type. The same page informs us that these lectures were delivered at the Bellevue Medical College, during the session of 1874–75, and that they are illustrated by 274 wood engravings. On the following page the book is dedicated to those students and physicians who have sustained and encouraged the author in his enunciation of new truths by their devotion and friendship.

The preface gives us the following facts: The book is written to gratify the desires of medical gentlemen of the highest standing, here and elsewhere. It was not written before because until now the author was not sure that his views were correct. He did not have time to write himself, hence he employed a stenographer to report his lectures. Other cases than those presented to the class are given from the author's note book.

The body of the work contains five chapters on "deformities" in general, five chapters on "talipes," two on "ankle joint," four on "knee joint," five on "hip joint," two on "deformities of the spine," two on "anchylosis," and three chapters on miscellaneous subjects, allied to the foregoing.

One acquainted with the author has only to read a single page to become assured respecting the authenticity of the book. Like all men who think and act energetically, Dr. Sayre has stamped his individuality on every part of his book. Confident that he is right, he enthusiastically endeavors to compel the assent of all others. Possessed of a taste for mechanics, he has admirably utilized it in so modifying the inventions of others as to make them of far greater practical value. The care, patience and perseverance which he exhibits in fulfilling all the conditions necessary for success in the treatment of this troublesome class of cases are worthy of all praise and imitation.

We cannot say that we admire the author's style, his frequent repetitions, his exuberant egotism, nor the descriptions of cases so highly colored in non-essential particulars. A careful reading impresses us that he has made too highly colored reports of cases to admit of perfect credence; still, on the whole, we think the book a valuable one, and worthy of careful study by all. Its very faults will stimulate thought, while its practical common sense will in the end greatly neutralize its objectionable features. He bases his classification of deformities upon their causes:

(1) Those arising from causes which *directly* affect the articulation of the body, such as anchylosis.

(2) Those arising from causes *indirectly* affecting the articulation of the body, as deformities from paralysis, burns, etc.

(3) Those arising from causes both *directly* and *indirectly* affecting the articulation of the body, as deformities due to curvature of bones, etc.

Again, he divides deformities into *paralytic* and *spastic*—the first from a deficiency of muscular power, the second from undue muscular contraction. Great stress is placed upon the recognition of these different causes of deformities, as upon this recognition depends a rational treatment.

In the treatment of deformities, he gives the following rule for deciding whether tenotomy be advisable or not: "Place the part contracted as nearly as possible in its normal position by means of manual tension, gradually applied, and then carefully retain it in that position; while the parts are thus placed on the stretch, make additional point pressure with the end of the finger or thumb upon the parts thus rendered tense, and if such additional pressure produces *reflex contractions*, that tendon, or fascia, or muscle, must be divided, and the *point* at which the reflex spasm is excited is the point where the operation should be performed. If, on the contrary, while the parts are brought into their normal position by means of manual tension, gradually applied, the additional point pressure does *not* produce reflex contractions, the deformity can be permanently overcome by means of constant elastic tension, and the more you cut the greater will be the amount of damage done." Speaking of mechanical appliances, he gives the following essentials of orthopedic apparatus: "Simplicity, facility of application, and the greatest lightness compatible with efficiency. It should never encircle a limb; its contractile force should act gradually and constantly; the instrument should be adapted to the deformity, and not the deformity to the instrument."

In the use of all apparatus for the relief of paralytic deformities, *permit, as far as possible, the natural motion of the parts involved in the deformity.*

In many forms of apparatus, the use of adhesive plaster is indispensable. "Maw's moleskin plaster" is recommended as the best. The surface to which the plaster is to be applied should be clean and dry. At a second dressing, all scarf skin should be removed.

The plaster should be thoroughly kneaded and then moulded to the limb ere subjecting it to the strain of traction.

The rules for the use of electricity are clearly given, and the necessity for manipulation emphatically urged.

We have not space to call attention to other general principles relating to deformities, nor to trace their application to particular varieties and individual cases.

The mechanical execution of the book sustains the well known reputation of the publishers.

ATLAS OF SKIN DISEASE. By Louis A. Duhrring, M. D. Part I. J B. Lippincott & Co.

The difficulty of recognizing the varieties of cutaneous disease is proverbial. All previous atlases have only given the varieties as observed in Europe. It is notoriously true, that these in many respects but imperfectly represent cases as observed here. Besides, many varieties are seen here which do not occur abroad. The names of the gentlemen engaged in the preparation of this work are a sufficient guarantee that it will be executed in a skillful and satisfactory manner. Part first contains four plates, with descriptive text, viz: Eczema (Erythematosum), Psoriasis, Lupus Erythematosus and Syphiloderma (Pustulosum). Each of these is executed in a nearly life size chromo-lithograph, painted from life. Taken with the explanatory text, the part constitutes a perpetual clinic on these cases. We doubt not that all progressive general practitioners will avail themselves of this capital chance for pursuing the study of this troublesome class of disorders.

SEVENTH ANNUAL REPORT OF THE STATE BOARD OF HEALTH OF MASSACHUSETTS. 1876. Paper. Pages 550.

In addition to the general report of the Board, this volume contains eight separate papers. One of these is of special value, as it includes a survey of the entire subject of the pollution of rivers. This survey was made under the direction of Jas. P. Kirkwood, C. E., of Brooklyn, N. Y. The cost was about $4,000, paid for by the State. It includes an "examination of the water basins of the Blackstone, Charles, Taunton, Neponset and Chicopee rivers, with general observations on water supplies and sewerage, with an appendix giving chemical analyses by W. R. Nichols;" "A report on the water supply, drainage and sewerage of the State, from the sanitary point of view, by F. Winsor, M. D.;" "A report on the disposal of sewerage, by Chas. F. Folsom, M. D." These reports cover about four hundred pages, are profusely illustrated by maps, diagrams, cuts, etc. We have only space at this time to give the recommendations by the board as based upon these studies:

(1) That no city or town shall be allowed to discharge sewerage into any water course or pond without first purifying it according to the best process at present known, and which consists in irriga-

tion; provided that this regulation do not apply to the discharging from sewers already built, unless water supplies be thereby polluted, and provided, also, that any intended discharge of sewerage can be shown to be at such point or points that no nuisance will arise from it.

(2) That no sewerage of any kind, whether purified or not, be allowed to enter any pond or stream used for domestic purposes.

(3) That each water basin should be regarded by itself in the preparation of plans of sewerage and water supplies.

(4) That accurate topographical surveys be always made of all towns before introducing water supplies or sewerage.

(5) That steps should be taken by special legislation, based upon investigations and recommendations of experts, to meet cases of various annoyances arising from defective arrangements for the disposal of sewerage.

(6) That irrigation be adopted at first, experimentally, in those places where some process of purification of sewerage is necessary, and that cities and towns be authorized by law to take such land as may be necessary for that purpose.

(7) That every city or town of over four thousand inhabitants be required by law to appoint a board of health, the members of which shall be required not to hold any other offices in the government of their town or city.

(8) In the present state of our knowledge, sweeping laws for the general and immediate purification of all our streams would be hardly justifiable, and they are not called for by the condition of our rivers.

Under "Sanitary Hints," Dr. Bowditch shows the influence of bad hygienic conditions upon epidemics among horses, presents some interesting facts respecting typhoid fever in Massachusetts, and gives a practical illustration of the disease and death occasioned in a family by changes in a homestead, made without due reference to sanitary law.

E. S. Philbrick, C. E., gives an excellent paper on "Defects in House Drainage and their Remedies." It should be studied alike by builders, plumbers and house owners. Disease and death from such cause are only too frequent.

Dr. A. H. Nichols reports on an outbreak of intestinal disorder, attributable to the contamination of drinking water by means of impure ice. This shows that it is unsafe to take ice for drinking purposes from any pond, the water of which is so fouled as to be unfit for drinking purposes.

Dr. F. W. Draper's report on the registration of prevalent diseases interested us greatly. It strikes us that the general principle adopted is correct and will result in advantage to both people and profession.

Dr. C. W. Folsom contributes an article upon the surface drainage of the Metropolitan district; Dr. F. Nicherson, on the health of Lowell.

The entire cost of this volume to the State was eight thousand dollars, half being for the survey of the water sheets of the State, and analyses of its various waters, with reference to their polution.

A REPORT RELATING TO THE MANAGEMENT OF THE INSANE IN GREAT BRITAIN. By Dr. H. B. Wilbur.

This report is extracted from the sixth annual report of the State Board of Charities of the State of New York. It is a readable record of a careful study of the insane asylums of Great Britain. Their management is under the direction of three classes of officials:

(1) Medical superintendents. These, selected for their attainments, skill and administrative qualities, manage all the internal affairs of the institutions, of which they have the immediate charge. They direct all that pertains to the daily life of the patients and all that pertains to the cure or amelioration of their condition, subject only to the rules and regulations of their respective boards of visitors.

(2) Visiting committees—men of character, position and influence, representing a county, municipality or incorporation, and chosen to manage the general financial interests of the particular institution under their supervision. They often meet to consult about its affairs, and by sub-committees and individual inspection, they are able to render intelligent and efficient service in the management of its affairs.

(3) Boards of lunacy, whose duties are to grant licenses, visit

and regulate asylums, report to the Lord Chancellor as to the condition of the same, and conduct and manage everything connected with certified lunatics in England and Wales. This board is regarded as fulfilling every important function necessary for the most perfect workings of these asylums.

MEDICAL AND SURGICAL MEMOIRS, CONTAINING INVESTIGATIONS ON THE GEOGRAPHICAL DISTRIBUTION, CAUSES, NATURE, RELATIONS AND TREATMENT OF VARIOUS DISEASES. By Joseph Jones, M. D. Vol. 1. Cloth. Pages 820. New Orleans: Published by the author.

This volume contains monographs on a variety of subjects, viz: The preliminary knowledge necessary for commencing the study of the nervous system, investigations into the nature, causes, relations and treatment of traumatic tetanus, observations on cerebro-spinal meningitis, as it appeared in the confederate army during the civil war of 1861–65, clinical observations on certain diseases of the lymphatic and circulatory systems, and of the liver and kidneys, investigations on the prevalence of pneumonia in the confederate army, and molities ossium.

We scarcely know which to admire most, the ability required to write such a book as this or the patience and perseverance exhibited. The author's resources have been ample, and he has improved them all. To workers located under similar conditions, this book will be of vast service. Unfortunately for its usefulness, the work is printed in such type as to utterly repel all but the most indomitable student; he too must yield unless his eyes be of extraordinary strength. The difficulty lies in the long lines and fine type, set solid. It is true, a vast amount of material is thus crowded into small space, still it may well be asked of what use is such material unless it can be used.

SPECIMEN FASCICULUS OF A CATALOGUE OF THE "NATIONAL MEDICAL LIBRARY," UNDER THE DIRECTION OF THE SURGEON-GENERAL UNITED STATES ARMY, WASHINGTON, D. C. Government Printing Office. 1876.

This library now contains about 40,000 volumes of books and an equal number of single pamphlets. It is now proposed to catalogue the subjects and proper names contained in this collection—in fact, the manuscript of such a catalogue is rapidly approaching completion. The plan adopted in the specimen before us of combining the subjects and authors in dictionary order under a single alphabet, strikes us as on the whole, preferable. Classification is mainly from the anatomical stand-point.

A complete catalogue on the present plan would make five volumes of about one thousand pages each. We trust that such of our readers as have influence with congressmen will use said influence in behalf of the publication of this proposed catalogue. If completed, it will surpass any similar catalogue in the world.

The following reprints have been received:

URINARY CALCULUS, a synopsis of thirty-seven cases, and "Immobility of the Jaw," with report of cases, by Dr. W. F. Westmoreland, in *Atlanta Medical Journal.*

AUSCULTATION OF THE ŒSOPHAGUS, by Dr. Louis Elsberg, in Transactions of American Medical Association.

ON STRICTURE AS THE INITIAL CAUSE OF GLEET, with remarks on the urethral calibre, by Dr. F. N. Otis, in *N. Y. Medical Jour.*, April, 1876.

REMARKS ON URETHRAL STRICTURE, before British Medical Association, by Dr. F. N. Otis, in *British Med. Journal*, February 26, 1876.

A REPORT ON DERMATOLOGY, by Dr. L. P. Yandell, Jr., in *American Practitioner*, May, 1876.

ON SOME OF THE DISORDERS OF SLEEP, by S. Weir Mitchell, in *Va. Med. Monthly*, January, 1876.

NEW INSTRUMENT FOR THE READY AND EFFECTIVE USE OF THE DOUBLE CURRENT IN THE TREATMENT OF SUPPURATING CAVITIES AND PELVIC DRAINAGE, by Geo. H. Bixby, in *Boston Med. Jour.*, Nov. 18, 1875.

THE NORMAL STANDARD OF WOMAN FOR PROPAGATION, by Dr. Nathan Allen, in *Amer. Jour. Obstetrics*, April, 1876.

HYDROPHOBIA AND THE WATER SUPPLY OF LIVING BODIES, clinically illustrated, by Dr. Z. C. McElroy, in *Cincinnati Lancet and Observer*, May, 1876.

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Original Communications.

CHRONIC BRONCHITIS.

Clinical Lecture by Prof. George P. Andrews, M. D. Reported by C. Hibbard, M. D.

CASE.—A. B., male, a blacksmith by trade, aged 47, looks much older, is fairly nourished, but is weak and walks with a cane; pulse normal, tongue not coated but large and flabby; bowels regular, appetite poor; complains of a cough, with pain in front and left side of chest; suffers from breathlessness after slight exertion, and even sometimes when perfectly quiet, but is relieved by raising "phlegm." Cough has troubled him at intervals for years, latterly quite constant.

Physical examination reveals, by inspection, slight emaciation, respirations somewhat quickened; by percussion, little variation from the normal sounds, though the thorax is slightly tympanitic at the apices; by auscultation, respiratory sounds roughened, vesicular murmur weak, slight broncophony, coarse and fine moist rales heard over different points in the chest, sounds varying from moment to moment, with ordinary respiration, very distinct and abundant with the cough, sibilant rales also heard occasionally. Diagnosis, chronic bronchitis.

Chronic bronchitis is a catarrhal inflammation of the bronchial mucous membrane, found more frequently during or after middle life among persons who are much exposed to inclement weather; males are more subject to it than females, as they are more out of doors. It develops ordinarily from acute attacks or "colds;" before the membrane has recovered from the first seizure, and while it is still engorged, a second comes on, and others follow, leaving the tissues at last permanently thickened and hyperæmic, and very susceptible to exposure to climatic changes, the slightest imprudence being sufficient to determine an acute catarrh. The persistent hyperæmia causes abnormal activity of the secreting bronchial surface, as well as migration of the white cells, and consequently more or less copious and purulent expectoration, sometimes the amount reaching several pints a day. The color is grayish, yellow when purulent, and often streaked with blood; when scanty it is tenacious and raised with difficulty, but when copious very slight exertion empties the bronchi. In severe cases many of the smaller bronchi may be occluded by plugs of mucus, which cause difficulty in breathing, but a violent fit of coughing removes them and the dyspnœa is relieved.

As the disease advances organic changes develop in the lung substance itself as well as in the bronchial walls. Catarrhal pneumonia frequently supervenes, and causes a fatal termination occasionally; bronchiectasis is commonly present, though excessive dilatation of the tubes is rare; emphysema is almost invariably an attendant upon the organic changes, often appearing early and sometimes increasing the volume of the lung very much. This symptom may be very marked at one period of the disease and nearly disappear later on from the gradual condensation of lung tissue, as the sequel of the inflammatory process. Emphysema usually appears first at the upper portions of the lungs, and is bilateral, but may finally involve all of the organs.

The patient complains of pain; this may arise from the bronchial congestion, when it is referred to the larger tubes; it may be pleuritic, when it is limited in area and on one side, and may be recognized by the signs of pleurisy; muscular pain from excessive coughing is more general and is often attended by soreness on pressure, and is specially felt on a deep inspiration; muscular pain of rheumatic origin or neuralgic in character, is more localized than the former, and may be determined by the absence of the physical signs from pleuritis, as well as by the existence of the rheumatic or neuralgic diathesis, and are marked by sensitiveness to the state of the weather; neuralgic pain is more transient and likely to change its position than when rheumatic.

Dyspnœa, which is a prominent symptom in most severe cases of chronic bronchitis, is due, as above stated, to occasional plugging of the bronchi with mucus, but this is transient; when persistent it is caused by the inflammatory thickening of the mucous membrane; when emphysema is present the dyspnœa is more marked and the patient is more easily affected by slight exertion, and a cyanotic hue is common, with dilatation of many superficial veins. Under these circumstances there is considerable hypertrophy of the inspiratory muscles, especially noticeable in those of the neck.

Finally the heart suffers from the excess of work thrown upon the right side, dilatation and hypertrophy following many cases of emphysema; or if organic change is not recognizable, the sounds are weakened and the impulse lacks force, and the heart presents the signs of failure in power.

The physical signs of chronic bronchitis may be deduced from the anatomical changes which occur. The narrowing of the bronchial tubes from the various causes gives a more bronchial tone and higher pitch to the respiratory murmur, and the irregularities of surface roughen the sounds. Rales are present in great variety and abundance in cases where there is a considerable secretion of mucus, moist when it is liquid and dry when tenacious, and coarse or fine according to the size of the tubes causing the sound. It must be borne in mind, also, that sibilant rales arise from the spasmodic narrowing of the smaller tubes in various parts of the bronchial tree. Emphysema gives a tympanitic tone to the percussion sound, but usually elevates the pitch; it is distinguished from the cavernous sound by being too general over both lungs and lacking the other characteristics of cavities, before mentioned. Bronchiectasis, when it involves the larger tubes, may be mistaken for vomicæ caused by destruction of substance, but here again the location of the cavernous sounds, the character of the expectoration (absence of fragments of lung tissue in the sputa), and especially the previous history of the case, enable us to determine the condition causing the signs.

The prognosis in chronic bronchitis varies with the age of the patient, his general condition, and the length of time the disease has continued. In elderly people who have suffered for years, even the free expectoration does not seem to exhaust the system much, and when nutrition is well sustained little danger is to be apprehended except from intercurrent attacks of acute catarrh or catarrhal pneumonia. Cachectic individuals, whether young or old, do not sustain the disease well, and many cases after a few years die of phthisis, catarrhal pneumonia complicating the bronchial affection and adding the lesions of parenchymatous degeneration to those originating in the bronchi. I know of no cases more hopeless than these. The prognosis in all cases should be guarded, and where there is reason to suppose that structural lesions are present the impossibility of complete cure should be carefully explained, and at the same time the certainty of mitigation to the symptoms promised, for much may be done by careful treatment to avert danger or remove dangerous symptoms.

Treatment.—During the period of quiescence in the disease little medication should be advised further than may be necessary to moderate excessive cough or expectoration, or to sustain the vital powers if signs of exhaustion show themselves. Patients should be instructed to restrain the impulse to cough as much as possible, and made to understand that often they can cough much or little, as they please; an irritation of the bronchial nerve filaments, not caused by an accumulation of mucus to be removed, but depending upon the morbid state of the circulation in the lungs, gives rise often to an almost constant inclination to cough. This is markedly under the control of the will, and so invalids should practice self-control, especially as emphysema is developed more rapidly by an excessive cough. A certain amount of cough for relieving the bronchial tubes of mucus is necessary, and anodynes should not be given to check it, but where the cough is harassing and uncontrollable bythe patient the various sedatives may be requisite, the most effective being opium, alone or in combination; but the habit of taking sedatives should be sedulously avoided, and the use of them limited to times of real need. Expectorants are useless, except during the attacks of acute catarrh to which these patients are subject, and consequently should be reserved for such times. Indications of malnutrition should be met on general principles, with tonics, nutrients, etc. Asthmatic symptoms, which are sometimes present and a source of great distress, may be relieved, usually, by the inhalation of nitrite of amyl; compressed air and oxygen gas are also useful; sedatives and the various anti-spasmodics sometimes relieve, but are uncertain.

The disease depending upon organic changes, cure cannot be looked for, but care on the part of the sufferer may for a long time avert a fatal result and even do something to recover injured respiratory surface. Recent experience shows that emphysematous lung tissue may be restored to its natural resonance and function when there is simply dilatation and not breaking down of the septa of the air cells. The inhalation of compressed air seems to have been efficacious in this respect, and the dyspnœa is generally promptly relieved; this method of treatment, however, is limited by the expensiveness of the apparatus for applying it.

Of more importance than medication is the careful attention to the hygiene of the patient. Pure, fresh air I place first on the list—the impaired lung tissue must have it, or rapidly worsen. The patient should live out of doors as much as possible, and for this reason a dry, equable climate, rather cool than hot, is desirable, but do not send a *feeble* person with advanced organic disease away from the comforts of home with limited pecuniary means; it is far better to meet the vicissitudes of climate as best we may than condemn the sufferer to the depressing influence of homesickness and the absence of accustomed luxuries. Flannel should always be worn next the skin, and the outer clothing suited to the day; special care should be taken in this respect, as the cutaneous surface in bronchitic persons is peculiarly sensitive to varying atmospheric conditions. Nutrition must be carefully watched and a nourishing diet insisted upon; the extra wear and tear of the damaged circulatory apparatus should be supplemented by abundant nutriment of a kind easily assimilated. If the digestive organs have less work to do, the extra nerve force may be used in carrying on the labors of the other ganglia, and the general waste of the system lessened.

In the advanced stages of the disease it becomes practically *phthisis pulmonalis* in the third stage, and the management applicable is similar to that required in phthisis.

REMARKS ON SALICYLIC ACID AND ITS SODIUM SALT.

By Dr. H. P. V. Petershausen, New York.

WHEN Prof. Kolbe, of Leipsic, had found a way to prepare salicylic acid in large quantities by synthesis (from carbolic and carbonic acids), he induced Dr. Thiersch to examine it with regard to its supposed antiseptic properties. The doctor applied it then in a large number of such surgical cases as he used before to treat after Lister's method, with carbolic acid. He was well satisfied with its action, and prefers it even before carbolic acid, for having no smell and because of its less irritating properties.

The great expectations entertained by the profession with regard to the new therapeutic animated the manufacturer to improve the mode of its preparation, so that the acid may be had now in a very pure state. It forms small white crystals, having an astringent taste. When brought into fermentable liquids, it interferes with fermentation, and when brought into putrid fluids it kills the little organisms peculiar to them. About 300 parts of water are required to keep it in solution. A stronger solution can be obtained, if the acid is dissolved in a sufficient quantity of alcohol or glycerine, or in both of them, to which solution the proper quantity of water may be added. The watery solution is used in surgery. Dr. Thiersch recommended besides the use of cotton impregnated with from three to ten per cent of the acid for the dressing of wounds. Some surgeons sprinkled, in case of small wounds, the dry acid upon them, and promoted their healing in this manner. In cases of diphtheria Dr. Letzerich powdered all parts of the throat attacked a few times daily with the acid, and several physicians used its stronger solution successfully as a gargle in the same disease.

The good results expected and obtained in all cases where the acid was locally applied under the necessary precautions, were explained by its influence upon the germs supposed to cause or favor the development of septicæmia, diphtheria and similar diseases. In diphtheria, the acid was also given internally, with a view that, as soon as it is taken up by the circulation, it should destroy the germs causing that disease, *i. e.*, act upon them in a similar manner as it does upon the organisms of putrefaction in a chemist's retort. With the same view it was given in intermittents, scarlatina, and especially in septicæmia. There are many observations on record by which its excellence in those diseases is asserted. Some physicians went even further, and declared that they had relieved or cured almost every disease by it. Such exaggerated reports rather injure than support the reputation of a new remedy.

The validity of such assertions was soon put into its proper light by a number of carefully made experiments. It was shown by the examinations of Professors Feser and Friedberger, of Munich, that only a very small quantity of the acid taken into the stomach gets into circulation. These gentlemen thought that the greater quantity of the acid is linked in the stomach to albumen, while Salkowsky made it probable that it enters the blood as sodium salicylate. The latter view is accepted now by many prominent members of the profession. As to the properties of the sodium salicylate, it has been observed already by Prof. Kolbe that it has no antiseptic action. Moreover, Zimmermann proved that, when given to animals made artificially septicæmic, the acid had no antiseptic properties whatsoever, even where large doses had been used.

Thus it is confirmed that the acid does not get into circulation in a free state, but as a compound. This is further proven by Professors Feser and Friedberger, who found that very large quantities of the acid, not getting neutralized in the stomach, will kill animals by asphyxia. Besides, it is shown of late by the experiments of Prof. Köhler, in Halle, that the free acid brought into the blood of animals, acts really as a poison. He injected the watery solution of the acid (1:300) into the jugular vein of animals and found that the injection was followed by a retardation of both respiration and pulse. An injection of large doses caused even the death of the animal by asphyxia.

From all that has been said, it will therefore be evident, that when taken internally, the acid cannot act as an antiseptic, and in case of infectious diseases, it cannot destroy the germs propagating them. For, the larger part of a common dose gets linked to sodium in the stomach, and comes only as salicylate into the circulation. Should, after all, a fractional part of the free acid come into the blood, it would not be sufficient to exercise any effect upon the mentioned diseases. But large doses, that might influence them, would probably cause the patient's death by asphyxia, if brought artificially into the blood.

After Prof. Kolbe had first obtained a larger quantity of the acid, he found that he could take about 20 gr. *pro die.*, for several days, without noticing any bad symptoms afterwards. Several physicians gave it soon in larger doses. Their attention was especially drawn to the antipyretic effect of the acid. Three or four scruples of the remedy, given once or twice daily, will lower the temperature considerably. Buss recommends to give viii or x grains every ten minutes, till the prescribed dose is finished. He did not notice any critical condition even after larger doses (ʒii ss) had been taken. But Riess, in Berlin, mentioned that the rapid decrease of temperature caused by the acid was sometimes followed by collapse (Wunderlich's collapse of defervescence). But this may be called forth by any rapid sinking of temperature.

The decrease of temperature is generally accompanied by singing in the ear and by perspiration. Buss and others did not notice any disturbance of digestion after large doses were taken, but sometimes nausea took place.

From several sides it was pointed out that the acid might corrode the mucous membrane of the intestines. Indeed, there are several observations recorded with regard to this change. Dr.

S. Wolffberg found hemorrhagic erosions in the mucous membrane of the stomach, and duodenum in case of typhoid fever and phthisis. The same was stated for numerous cases by Riess against Stricker, who had not found such effects of the acid in those of his cases that terminated fatally. Of course, the mere absence of such lesions in certain cases does not prove that they might not have existed in others that turned out well.

The diseases in which salicylic acid has been used with advantage are: pneumonia, phthisis, typhoid fever, scarlatina, pleuritis and acute articular rheumatism. All observers agree that its action as an antipyretic in these diseases is more certain than that of quinine. Of late the salicylic acid gained great reputation as a kind of specific in case of acute articular rheumatism. This was aroused by a somewhat too enthusiastic report of a number of cases made by Dr. Stricker in Berlin. He relates cases cured in from twenty-four to forty-eight hours. Before his results were published, L. Riess, of Berlin, had already recommended the acid as an excellent antipyretic in this disease. He remarked that in many instances the decrease of the temperature is accompanied by an improvement of the swelling of the joints. Riess had the same good results from the salicylate as from the acid. Moeli recommends already the sodium salicylate as a substitute for the acid, with the advice to repeat the dose of ℈iii–iv in severe cases after several hours. In case it is thrown off, it may be given in a clyster. Prof. Köhler found by his experiments with animals that pulse and respiration is retarded by the salicylate. He considers it a better antipyretic than quinine and baths.

Of a number of cases of acute articular rheumatism that came recently under our observation some were treated by salicylic acid, others by the sodium salicylate. Ten grains of the acid inclosed in a wafer were given at intervals of one-half to one hour, till the whole dose was taken. The temperature decreased rapidly in all these cases, and in a few of them all symptoms of the disease disappeared in the course of three or four days. In others, not worse than these, only the pain in the joints was lessened, while the swelling remained unaffected. In one case a relapse took place. Both preparations might have equal effect upon the disease. These results are similar to those obtained by Riess, who accuses Stricker of having selected only those cases for publication that turned out most favorably. From the related facts it will be obvious to the reader that neither the acid nor the salicylate is a specific for acute articular rheumatism.

When the salicylic acid was introduced to the profession as an internal remedy, it was recommended to give it in the form of powder dispensed in wafers. But nausea was oftener noticed after this medication, wherefore compressed tablets were prepared from the acid, and given with better results. Some advise to prescribe it with two or more parts of sugar, and order to wet each powder, before it is taken, with some water. As the sodium salicylate insures the same antipyretic effect as the acid, but does not irritate the mucous membrane of the stomach and intestines, nor act in an unpleasant manner upon the brain (like quinine), or cause nausea, it is preferred now before the acid by many physicians. It may be given even in a concentrated solution (1:30). In case the salt cannot be had, it may be prepared extemporaneously by solving the acid in a solution of some sodium salt (phosphate, borate, etc.)*

Resuming the principal facts in regard to salicylic acid, we find that

First, It is an excellent antiseptic when applied *externally,* and may, in surgery, take the place of carbolic acid on many occasions.

Second, It is perhaps the best antipyretic now known, quinine not excluded, when applied internally.

Third, As an *internal* remedy, it has no antiseptic properties.

Fourth, The best form in which it is given internally is sodium salicylate.

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* FOR INTERNAL USE:

℞. Sodæ carb., ʒ ij ; aquæ font., ℥ ij ss ; acid, salicyl., ʒ ij. M.
℞. Sodæ phosph., ʒ iv; aquæ font., ℥ ij ss ; acid, salicyl., ʒ ij. M.

FOR A GARGLE:

℞. Acid salicyl., gr. xx; alcohol, q. s. ad. solut.; aquæ font., ℥ iv. M.
A part of the latter may be replaced by glycerine.

OINTMENT.

℞. Acid salicyl., ʒ i.; ungu., ℥ i. M. Ungu.
A liniment with olive oil may also be advantageous in some cases.

ACHIEVEMENTS IN MEDICINE–INCENTIVES TO ITS SCIENTIFIC STUDY.

Read before the Lansing City Medical Society, July 7, 1876, by George E. Ranney, M. D., of Lansing, Mich.

Mr. President and Gentlemen of the Lansing City Medical Society:

I AM informed that at your last meeting, during my recent absence from the city, you appointed me to read an essay at this time. That proceeding on your part was somewhat "summery," in view of the warm season, and the many hindrances that have beset me since that time—circumstances which I urge as a partial justification for what I am about to afflict you with.

Permit me, then, to discourse upon a less laborious topic than an abstract, didactic or scientific subject, while in my rambles I forage upon the border lands of medicine, and briefly mention some of its achievements, and discuss also the common interests and duties of the responsible and honorable profession to which we have dedicated ourselves, and in the pursuit of which we have embarked, for a life voyage, our hopes and aspirations for the attainment of whatever earthly reward or honor is to crown our struggles on this tempestuous ocean of our being.

I but recently returned from the meeting of the American Medical Association, where, with fraternal spirit, we gathered around the throne of medicine, from the forests of Maine and New England's snow-clad hills, from the Pacific slopes, "where rolls the Oregon," from the golden gates of California, from the silvery lakes of the northern frontier, and from the Southern coast, fanned by the breezes of eternal summer. We extended the right hand of fellowship to members of the profession from foreign lands, who knew not our language, except the common one of medicine, familiar to the scientific physician throughout the world. We were brought together by the same motives that bring us together to-night—to go deeper into the mysteries of disease, to learn more of the means of preventing it, and when unsuccessful in preventing, to perfect our skill in the use of the weapons of defense and offense with which to cripple its march, or to arrest and humiliate it.

Organization is the great want of our profession. Though unable to take part in your previous meetings, permit me to congratulate you upon the formation of this society, and to commend the act looking to the enlistment in our ranks of the younger disciples of Æsculapius in our midst.

"When bad men combine," says Burke, "the good must associate, else they will fall, one by one, an unpitied sacrifice, in a contemptible struggle." When our country, and especially our State, is overrun with ignorant pretenders and charlatans, who are anxious to assume the office of "doctor," at the risk of their patients' health and lives, for a mere pittance, and while a portion of the press employed in their interest is clamoring for their recognition by us, it is well for our honor that we associate for the protection of that professional code, both written and unwritten, adopted by the educated physician and gentleman everywhere—a code not founded upon commercial policy, or carried out in view of political expedients.

Certain papers—let us hope through an ignorance of the principles of medicine, which has always prevailed to a large extent among the laity—are constantly misrepresenting us in language apparently borrowed from the quack himself, who utters it to deceive and prejudice the minds of the people against scientific medicine.

The high moral ground our profession has taken scorns the cheap notoriety sought and obtained by the quack in his newspaper advertisements—a fact which has not, perhaps, had a tendency to bind us to a portion of the press with "bands of steel." Our profession furnishes to the press and public rich repasts, upon which they feast and nourish their intellects, and in return, because of our attempt and firm purpose, individually and through our organizations, to be the custodians of our own honor, and choose our own professional associates, the press have applied to us such choice appellations as "bigots," "asses," "fools," "pigheads," "hide-bound," and such other "pet" names as their fertile brains could invent. We are the "bigots" that have "harnessed the wisdom of the world," and carried the brilliant torch of science through the dark ages, from the age when "ignorance was the mother of devotion," to the age when "knowledge is power." We are the "fools" that wrested the medical mysteries from the priests of the dark ages of necromancy and the witches' cauldron, and spoiled the special charms of the numerous pretended crowns of thorns of the Saviour and sundry original lances that pierced his side, and abolished those religious establishments that speculated in the professed bottles of milk of the Blessed Virgin, which they sold at enormous sums to those afflicted with disease.* We are the "hide-bound" that do not believe in magic, amulets, incantations, alchemy, nor in the visionary though sublime abstractions of the Neo-Platonic philosophy of the middle ages. Having never yielded to phantom authority, nor consulted the spirits of gods, demons or oracles, we have stubbornly refused to recognize as our professional equals the natural bone setters and self-styled eclectics, old "sands-of-life," the clairvoyant or the second-sight types of humanity, and all the "leperous and abominable heretics that prey upon the prejudices and fears of men, and flaunt 'doctor' on the red flag of their festering commune."

We admit that we have not found the philosopher's stone, the veritable elixir of life, or the El Dorado of perpetual youth; but we have controlled the plague and the leprosy through quarantine and hygienic measures, instead of resorting to the futile effort to drive them away by putting up prayers in the churches or trusting to the prayers of the priests for deliverance. I will mention briefly a few of the important things which have recently been done by our profession for the good of mankind. As we view our medical temple, and walk through its galleries, and behold the work of its master builders, what an array of illustrious names greet our memory.

"In this fair niche, by countless billows laved,
Trace the deep lines that Sydenham engraved;
On yon broad front, that breasts the changing swell,
Mark where the ponderous sledge of Hunter fell;
By that square buttress look where Velpeau stands,
The stone yet warm from his uplifted hands."

We behold the statue of Jenner, who only seventy-eight years ago announced his discovery of vaccination, which has nearly banished a disease from the land which in England alone claimed 45,000 victims annually and disfigured as many more. Small-pox attacked young and old alike, and nearly all were expected sooner or later to have it. Those not disfigured were exceptions to the rule.*

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* Draper.

We have passed the statues of Hippocrates, Galen, Ambrose Pare and others, and now linger for a moment near the bust of Læennec, with the stethoscope in hand. The chest had its language that no human ear could understand until Læennec, applying the principles of acoustics, took a cedar tube, and, putting it to his ear, asked the chest a thousand questions, which were correctly answered through the vibrations of the air in the lungs, and the heart murmured in his ear its long-hidden secrets. His discovery has rendered it possible to diagnose with wonderful accuracy the diseases of the heart and lungs, and enables us to determine upon their rational treatment.

Passing along, we see the bust of Sanctoria, and are reminded of the thermometer, and the wonderful story that it tells us at the bedside of our patients. Among those who have placed the world under obligation to them, and whose portraits we might expect to find, are the Hunters, Bells, Cooper, Abernethy, Bright, Forbes, Simpson, Sime, Pereira, Ferguson, Erichsen, Paget, Wells, Bowman, of Great Britain; Lobstein, Bouillaud, Broussais, Richerand, Cloquet, Cruveilhier, Desmarres, Sichel, Dupuytren, Bichat, of France; Hebra, Gruber, Rocitansky, Virchow, Langenbeck, of Germany, and those of many Americans who occupy conspicuous places.

Anæsthetics have uncrowned "old King Pain," and the patient afflicted with tumor, necrosed bone, or lacerated limb, by it is wrapped in unconsciousness, while the surgeon, with knife, scalpel, and saw, does the work which is to make him well. When the patient emerges from the vale of Lethe he can hardly realize that the operation has been performed, as he had experienced no anguish or pain; and if Esmarch's bandage and the ligature have been used, he may look in vain for evidences which blood might reveal, for during his sleep an important though painless and bloodless operation has been performed with a deliberation and confidence unknown to the surgeons of the eighteenth century.

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* Quackenbos.

Through the delicate needle of the hypodermic syringe we convey to the very seat of pain, the torture of disease, an appropriate antidote. The ophthalmoscope reveals to us the internal chambers of the eye, the mote, enlarged blood vessel, fiber, or opacity that obstructs the vision. The laryngoscope enables us to see and touch and put in tune the vocal chords. With the aspirator we enter the pleural cavity, the abdomen, the bladder, the liver, and even the heart, with safety, and empty them of morbid effusions or retained secretions.

By transplanting skin to parts extensively denuded of integuments, we have rendered it possible to make them sound, and avoid the contraction and deformity that would come from an otherwise extensive cicatrix. Ingenious instruments and the wonderful skill of the surgeon have made man a toy in his hands. We have not been able to arrest "old Time" and make him retrace his steps, but we have dulled his scythe and impeded his destructive march, and added new spaces to the dial of man's chronometer of life. During fifty years ending in 1844 we decreased his harvest of death twenty-two per cent in certain parts of England, and wherever statistics have been kept, equally gratifying results have followed in other places during and since that time. There was fifty per cent less mortality in London during the same years of the nineteenth century than during similar years of the seventeenth century—the difference being as great as the difference between an ordinary year and a year of the cholera.

Typhoid fever is now considered a preventable disease and under the control of sanitary laws. Scurvy has been nearly driven from the ocean, and the wilds of India have been reclaimed. The etiology of cutaneous diseases has been studied and classified, and in the treatment of most of them we have achieved a triumphant success. We cannot always, as desired by Macbeth, "minister to a mind diseased, and pluck from the memory a rooted sorrow," but we can often attack those diseases once deemed incurable and bid the leper be clean.

Among the manifold sufferings with which man is threatened, in consequence of the tenderness of his nature, irritation of the mind is one of the saddest; but thanks to the efforts of our profession and the munificent coöperation of State and municipal governments, asylums have been established for these unfortunates, where, under scientific management and treatment, from seventy to eighty per cent are restored to health. In the United States alone 26,433 insane persons are receiving treatment in State asylums, and 2,008 receive accommodations in private institutions. Aware of the molecular change that trains of thought and moral influence may produce in the brain, and regarding the pathology as taking place in the brain itself, the treatment has rationally resolved itself into psychical and medical. The various forms of insanity are without doubt as old as the human race. Our knowledge of them reaches back into the dusty past where its history is blended with mythology; to a time when insanity was looked upon as coming from an evil or divine spirit, and insane patients were accordingly treated cruelly or leniently, but always with a pious fear.

From the pressure of practical necessity which resulted in the development of medical science, the profession not only regarded and treated the insane as beings spiritually astray, but as beings afflicted with actual disease of the body; and now the same care is bestowed upon patients mentally deranged as is upon patients suffering from any other bodily ill. We look upon the external manifestations of insanity as we do upon symptoms of other bodily diseases, as found in typhoid fever, pneumonia, etc. Hence the insane person is not held morally responsible for wrong acts, as he is controlled by irresistible impulses. He is as likely to destroy his best friend, or himself, as an enemy, for

"He hears a voice we cannot hear,
Which says he must not stay;
He sees a hand we cannot see,
Which beckons him away."

[To be continued.]

A CASE OF CÆSAREAN SECTION.

By Dr. O. P. Barber, Saginaw City, Mich.

I WAS called on Saturday evening, January 22d, 1876, at 11 o'clock, to see Miss Lottie Fisk, a dwarf, aged 17, and found her with well marked labor pains coming on regularly and lasting from one half to one minute.

Found, upon examination, the os slightly dilated, head presenting, with occiput to promontory of sacrum, against which it was resting, the promontory projecting out into pelvic cavity so as to diminish it antero-posteriorly to a scant two inches.

I allowed the pains to go on till 1 o'clock without, of course, finding any perceptible alteration in position of the fœtal head, and making up my mind that it was extremely difficult for a "camel to pass through the eye of a needle," I sent for Drs. White, Bliss, Small and Watson, who, after giving the case a thorough and careful examination, decided that the Cæsarean section offered the only chance for the life of either mother or child.

The bladder and rectum having been evacuated, we put the patient under chloroform, made an incision from navel to symphysis pubis, down to and through the womb, and delivered her of a living child twenty inches in length and weighing six pounds—*the mother being forty inches. long and weighing sixty-five pounds.*

The incision in the womb was closed by three silver sutures and that of the abdomen by interrupted silk sutures one inch apart, taking a deep hold in the peritoneum; dressed it with adhesive plaster, compress and roller, with drainage tube projecting from pubic end of the womb.

Upon coming out from influence of the anæsthetic she began complaining of great pain; gave one fourth gr. morphia sulph. and repeated every twenty minutes until three grains had been given, before producing the desired effect; then prescribed gr. 2 of opium to be given every hour or two, so as to produce partial narcotism, and left her at 8 A. M., 23d, feeling comfortable. At

6 P. M., same day, pulse 100, strong, vomits frequently since last seen; slight hemorrhage from vagina; urine drawn with catheter; complains of room being too warm; directed thermometer to be kept at 70°; diet of beef tea and iced milk.

24th. 9 A. M.—Says she rested well and feels better; had a passage of urine, and bowels moved freely; pulse 112; temperature of room 70°; has taken nourishment, but it was not retained; washed out vagina with warm water thrown up with a Mattison syringe, which washed away clots of a fetid odor, causing considerable pain; gave hypodermic injection of morphia sulph., and prescribed rectal suppositories, 3 gr. opium every two hours, with discontinuance of morphine by stomach; diet of milk toast, beef tea and cracked ice.

25th. 9 A. M.—Pulse 120; temperature good; no vomiting since last visit, and has retained considerable nourishment; discontinued opium suppositories and prescribed solution morphia for controlling pain, and a 5-gr. quinine suppository, with 2-gr. quinine pill every two hours by stomach; diet, raw oysters, mutton broth, with rice and prepared food; changed bandages and bedding.

26th. 9 A. M.—Restless through the night; pulse 130; sighing respiration; surface covered with perspiration; bowels tympanitic, with frequent escape of gas; has taken and retained a large amount of nourishment; took out the drainage tube and cleaned it, considerable pus following its removal and more escaping on its introduction; ordered the continuance of the 5-gr. quinine suppositories and 2-gr. pill every hour, with beef tea, whisky egg nogg, and cloths saturated with quinine and whisky over the stomach covered with oiled silk.

27th. 9 A. M.—Symptoms much the same, but patient very weak and kept gradually sinking, and died at 5 P. M.

Post-mortem held on 28th at 9 A. M., sixteen hours after death, showed that the abdominal incision, down to the peritoneum, had not united, but that the peritoneal wound had closed perfectly, showing but a very slight inflammatory action throughout its surface.

Uterine wound gaping widely, with disintegration and thinning down of its edges, only held from opening throughout their entire length by the sutures, and they nearly drawn out. The uterine cavity was partially filled with decomposed clots.

The child is alive and hearty at this date, July 18, 1876.

LABOR OBSTRUCTED BY OCCLUDED OS.

By Dr. E. B. Ward, Jackson, Mich.

SEVERAL years ago, I was called to attend Mrs. D., aged 35, and found her in labor at full term. She was a robust woman, and her pains, which had begun about six hours previous, were severe and expulsive. On examination I found a vertex presentation but failed to detect the os uteri, which I supposed was out of reach posteriorly. After waiting a sufficient length of time, another examination revealed the fact that the os was obliterated, with the exception of two small openings about the size of a crow-quill at each lateral angle, and the intervening space was occupied by a firm cicatrix, so that the child was, as it were, in a shut sack.

On inquiry I learned that this was probably caused by adhesion following injuries received at a previous labor, when instruments were used. As the pains were vigorous and the danger of rupture at some other point imminent, chloroform was administered, and introducing a blunt pointed bistoury into one of the openings, I divided the sectum, and then extended the incision laterally each way, well up towards the vaginal walls. After this the labor progressed naturally but slowly, and the woman was delivered in about thirty-six hours, without further instrumental aid. The child was still-born, but the mother made a good recovery.

The following year I attended her during a miscarriage, and found the os patent, and subsequently she was delivered by me on two occasions of living children. The case being rather anomalous, it occurred to to me that it might be of interest to the profession.

LATENT PLEURISY.

A case by Dr. C. E. Koon, of Casnovia, Mich.

Raymond B., a bright lad of seven, was attacked some time in March with influenza. Nothing unusual marked his two weeks' sickness, but after getting out of bed he continued pale and weak, with shortness of breath, emaciation and distressing cough.

Another physician was called, who, finding extensive dullness over right side, diagnosed enlargement of liver, and began a vigorous course of treatment, of which physic formed the chief part, and after eight weeks he came to me, presenting the following interesting phenomena:

Face puffy and colorless as death itself; emaciation marked; temperature 102° F.; pulse 130; respiration 36; puerile respiration heard in left lung; complete absence of respiration in right, with dullness from clavicle down four inches below floating ribs; bronchial blowing, aegophony and *all* the unmistakable signs of pleuritic effusion. The heart was found beating three inches to the left; the liver pushed down into abdomen; spleen appearing under umbilicus; feet swollen; fingers clumped; his appetite at times voracious, with great thirst; stomach irritable, rejecting most of his food; the least exertion producing distressing paroxysms of coughing; peevishness and a peculiar mental hebetude marked his actions. My little patient had evidently suffered from latent pleurisy, which had transpired unnoticed, and now how to best get rid of the enormous load which was crushing out his young life was the absorbing question.

Prescribed quinine, muriate of ammonia and digitalis in full orthodox doses every six hours, with iodine ointment to side; a full bath each night, to promote cutaneous action; avoiding liquids as much as possible, taking a dry cracker to moisten mouth instead. To quiet cough I gave a mixture of cannabis indica, gelseminum, syrup of licorice and laurel water.

On presenting himself after three days, I found temperature, pulse and respiration unchanged. The clavicular region yielded a clear sound, with faint respiratory murmur, mixed with dry rales. Cough not quite so distressing. Continued treatment.

Three days later appeared more cheerful; kidneys and skin acting freely; stomach tolerating food kindly; cough better; temperature 100°; pulse 120; respiration 30. Three days later temperature 100°; pulse 120; respiration 30; respiratory sound heard in upper half of lung; bronchial blowing posteriorly; liver and spleen slowly returning towards their places; added citrate of iron to prescription. On the eighteenth day of treatment his symptoms all gave promise of a speedy return to health; temperature 99°; pulse 100; respiration 24; talks and laughs freely; still some dullness at base of lung.

On the twenty-eighth day no signs of effusion could be detected. Temperature, pulse and respiration normal. The misplaced organs had regained their normal positions, and save some deformity of chest from contraction, he was apparently well.

PRESIDENT'S ADDRESS BEFORE THE SOUTHERN MICHIGAN MEDICAL ASSOCIATION.

By Dr. J. S. Hamilton, of Tecumseh, Mich.

Mr. President and Gentlemen:

I TAKE this opportunity for most sincerely thanking you for the honor you conferred on me in electing me your president for the year now closing; also my most grateful acknowledgment for your coöperation and support, so considerately and kindly enabling me to discharge the duties of the office.

The Medical Society of Southern Michigan and Northern Indiana and Ohio has now attained so important a position by its rapid growth numerically and by the experience and talent of its members, that its powers, if wisely and energetically called into action, and its doings judiciously promulgated, cannot fail to be productive not only of good to its members individually, but of great good to the profession and to society at large.

If we are attentive to observe the tendencies of the times, we shall mark the universal propensity to association—the tendency of individual minds to unite and coalesce. The more a mind is developed and improved the more multiplied and varied will be its susceptibilities and sympathies, and so the more numerous its points of contact with other minds. All the social elements of man's nature are developed and strengthened by civilization and refinement, and he seeks his fellow, and finds his life and enjoyment in communion and coöperation with him.

Combinations are forming and extending themselves in every direction all over the civilized world, especially where there is any degree of popular liberty enjoyed. When any important interest is to be secured, or magnificent enterprise opened, multitudes of minds instinctively come together, combine their energies, and move on towards their object with a might and efficiency exemplifying in the moral world the immeasurable power of the principle of the combination of forces.

All the great physical improvements serve to strengthen and extend the social principle, removing all obstructions to its free, full play over the wide surface of human affairs.

These large associations, voluntarily formed for the accomplishment of specific purposes, by intelligent, independent minds, are a peculiar and very striking feature of our times.

Contemplate the masses of minds bound together by a strong moral force, originating in identity of views and feeling in reference to some great truth or great interest, animated by one spirit, and moving on with a momentum resulting from the combination of these *living* forces. Here every individual mind is a living power—instinct with intelligence, fully possessed with the common purpose, thrilled with the common interest, and fired with the common enthusiasm; each one a wheel in the vast combination, "full of eyes," and glowing with the spirit of the living creature which pervades, superintends and directs the whole movement.

It is in the spirit of this general tendency of minds—in a state of incessant action, and constantly unfolding and expanding their powers to approximate each other, to interlock their sympathies, to interlink their interests, and to identify their objects and pursuits—that we are gathered here as an organized society to consider the best methods of advancing the interests of our profession.

The time is propitious. The century now passed into retrospect is the most remarkable century of individual and social progress in the history of the civilized world. The accumulated knowledge of the past, and the wide opening fields of new and more brilliant achievements of the near future, are powerfully incentive to vigorous study.

It would be profitable, if we had the time, to consider some of the circumstances in our condition which urge us to extraordinary effort. It is our obvious duty, connected as we are with the world around us, to study the character of that world. The circumstances with which we are surrounded will indicate, if not the nature and the amount of action we are to put forth, at least the course that action must take. We may not aspire to a full comprehension of the true spirit of all the tendencies of this wonderful age, but an intelligent survey and a sober consideration of some of its more prominent features will be useful in teaching us what should be our aim and what we must do. One distinguishing feature of the age—that which must be obvious to the least observing—is the universal and intense action of mind. Could we take our position upon some lofty elevation, from which we might look abroad over earth's busy millions, what a strangely animated scene would meet our view. Is there a spot where the mind is in a state of stagnation? Rather do not all the elements, physical, mental and moral, seem to be aroused not only, but to be in a state of tension, driving on, in some direction or other, at the top of their speed?

We mark, as a consequence, an unwonted development and enlargement of the powers of the human intellect.

When the mind acts it will grow; when it acts energetically it will grow rapidly, and when its action is directed to great objects its powers rise and expand in proportion. The mind of man never acted on so great a scale, never swelled with such grand conceptions, never gave birth to such magnificent designs, and never prosecuted its enterprises with such an array of powerful and well adapted means, as at the present.

As the mind is immortal and infinitely expansible, its resources are inexhaustible, and when these are incessantly evolving, new wonders may be expected to make their appearance, in constant succession, on the great theater of intellectual action. And is it not so? Are we not ever and anon astonished and delighted by the brilliant discoveries of the age? Do not the products of the human mind in the nineteenth century surpass in number, grandeur and brilliancy those of all former periods?

And it is especially worthy of remark, as another characteristic of the times, that all these products are made to minister directly and powerfully to human wants and to human advancement. A great principle is struck out or more slowly disengaged from a confused mass of facts, and it at once takes its course on the broad field of practical life, and becomes at once an important element in all the operations, and a force propelling with increased velocity, the whole machinery of society. But just as we begin to appreciate the benefits of the new discovery, and to conclude that it is the *ne plus ultra* of its kind, another bursts upon us like another morn, risen at mid-noon, and moves us on in the bright career of improvement with still augmented velocity. We can see no possible limits to the advancing series and the progressive results. The mind is overwhelmed by the prospective view.

Another result we may notice of the general action and consequent improvement of mind, is the tendency of minds to unite and to associate their interests. To this we have already referred.

In this march of intellect and visible progress the cultivators of the art and science of medicine may be distinguished as occupying an advanced position, and the science of medicine, though still an imperfect system, has grown with a rapidity which has astonished its cultivators, while it has immeasurably benefited humanity. Studies pushed in every direction which could at all enlarge its domain have been rewarded in a measure corresponding with the unflagging zeal which instituted and still continues to prosecute them.

Within the century medicine has been rescued from the realm of empiricism and speculation, and brought into the great circle of the inductive sciences, and like them, is to be investigated and studied by methods of inductive reasoning, in which are so happily combined the observations and interpretations of phenomena with that process of mental analysis by which great principles and laws are discovered. The past has accumulated such stores of knowledge bearing upon medicine, that we may safely say there is no other profession or occupation which rests upon a broader foundation.

It is not our purpose to discuss the reciprocal relations and dependencies existing between science and medical art, but only to indicate the wonderful harmony and companionship in which they are acting together, and the happy results of such action. Science has not disdained to become the handmaid of medical art. She has not considered it stooping to minister to human suffering and want. Her offices are invested with not a little dignity, in that they have been fraught with the richest blessings to society. She has lengthened life, mitigated pain, and extinguished disease. We cannot speak in detail on the progress of medical science and art, on the extent of medicine in all the great departments of our profession. And to speak in general terms on such a subject! What is it but to use household words and speak that which is familiar to all?

Our profession in all its interests has been advanced. From its past progress may be inferred its future career. The boundaries of our science are daily extending themselves. We have now an insight into the nature and structure of the body such as we never possessed before. Every way we are striding on nearer and nearer towards a more perfect acquaintance with the laws of diseased action.

The microscope has done nearly as much for some branches of medical knowledge as the invention of printing did for the extension of knowledge in general. Physiology, already enriched by the investigations and discoveries of the greatest minds that have adorned our profession, is constantly receiving additions from laborers in all countries where scientific medicine is cultivated. Chemistry has contributed liberally from almost every element of which our planet is composed, and from new combinations of matter which it has itself invented to strengthen the *armamentarium medicum.* It has farther become of immense service in anatomy, in physiology, diagnosis, pathology and toxicology.

There is not a country on the habitable globe that has not contributed to our materia medica. Botany, including vegetable physiology—itself a mature science—is constantly ministering to the improvement and extension of our therapeutical resources. Histology is a new science comparatively. There is one branch of medical study which the progress of the past has brought prominently forward for thorough and systematic inquiry. I mean that great department which may be designated preventive medicine. It can be demonstrated by statistics of mortality that the maladies which decimate our race and ravage communities belong to the great zymotic class—to fever in all its forms, whether infectious or malarial, to cholera, diarrhea and dysentery. How may these and many other affections, by efficient sanitary measures, be capable either of entire eradication or of great mitigation! And yet, owing to our limited knowledge, the pestilence that walketh in darkness, and the sickness that destroyeth in the noonday, still pursue their course, carrying with them desolation and sorrow. A century ago Dr. Rush inquired, "Who knows but it may be reserved for America to furnish the world from her productions with cures for some of those diseases which now elude the power of medicine?" May we not change the inquiry and ask, "Who knows but what the future may develop such a knowledge of the laws of hygiene as to suppress them entirely?"

Gentlemen, all the intellectual wealth of a century has been gathered in by accomplished scholars and workers, and we have it for a possession. But we ought to be impressed with the truth that with it comes an imperative demand for an intellectual culture vastly greater than has hitherto been required, that we may be able to apply this knowledge to the necessities of our art.

This society is a demand of the times. I consider its organization not only timely, but full of promise. It indicates the spirit of improvement and progress which animates its members. Its work has been begun under circumstances of great and peculiar advantages, as well as of peculiar encouragements. Never before did the progress made in medicine and the collateral sciences, and the character of that progress—the number and variety of facts being accumulated—never before did they so much require the coöperation of minds of various aptitudes for their elucidation. The means of investigating diseases have become numerous and varied in character, and it is undeniable that many of them require great labor, constant practice, as well as natural aptitude, to fully carry them out. Never before were the members of the profession as a whole so well prepared to take a part in any undertaking for mutual improvement. From inclination, from position or other circumstance, some will devote themselves more to one branch than another, while on account of constant occupation in the practical business of the profession, many are hindered from entering largely into such studies. But all observers may contribute to the common stock—one man his observations, another his skill in investigation. In order, however, that the society may enjoy the esteem of the profession and the confidence of the public, it is important that members should contribute to the society either papers of a well digested character or carefully drawn cases, for discussion. Committees, too, should feel under obligations to make reports upon subjects committed to them for investigation. Truth, gentlemen, is the gem we seek, and, like all other inestimable possessions, it is only to be discovered by *perseverance*, grasped by *industry* and held by *devotion*.

Brothers, if we work together fairly toward the attainment of the objects proposed in our constitution and laws, we can but attain to a gratifying success. But exertion is indispensable. What *useful* purpose is to be accomplished without exertion? Each should act as if part of the success of the society depended on himself.

As it has been intimated before now, the current of improvement is fast flowing, and many are borne onward with it. Those who remain inactive on the shore will soon be left far behind, serving a purpose indeed, but only the ignoble one of marking how far others have advanced. Says Dr. Rush, away back in the century, " Human misery of every kind is evidently on the decline. Happiness, like truth, is a unit. While the world, from the progress of intellectual, moral and political truth, is becoming a more safe and agreeable abode for man, the votaries of medicine should not be idle. All the doors and windows of the temple of nature have been thrown open by the convulsions of the late American revolution. This is the time, therefore, to press upon her altars."

The centennial of our nation has been celebrated. The nations of the whole earth have been invited guests at the celebration. Specimens of our attainments in all the industries of the country, in science and art, in literature and philosophy, in all that belongs to advanced civilization, are on exhibition. In all this exhibition the achievements of medicine occupy no subordinate place. In the language of the author of "A Century of American Medicine," we can justly say that American physicians and surgeons are the best contribution of the United States to medical science and art. A century of American independence has thrown open wider and still wider "the doors and windows of the temple of nature. This is the time, therefore, to press upon her altars."

REPORT OF A CASE OF FOREIGN BODY IN AIR PASSAGES, WITH SPONTANEOUS RECOVERY.

Read before the Southern Michigan Medical Association by Dr. John P. Stoddard. of Albion.

THE history of the case that furnished the specimen that I now exhibit is short, and to me interesting and peculiar. It is peculiar from the fact that neither patient, friends nor physician had the least suspicion that a foreign substance in the air passages was the cause of the patient's illness.

On the evening of March 14, 1874, I was summoned into the country some five or six miles to see Frederick S., a robust farmer boy, who had fallen ill some two or three days previously. At first he was but slightly sick, and until the time of my visit had not thought himself ill enough to require medical aid. The patient now had a high fever, with a constant hacking cough, though occasionally the cough would for a moment be violent, yet with no particular manifestations of dyspnœa. The expectoration was principally of a thick tenacious character, except when the cough was more violent, and then it was more of the "brick dust" variety. Percussion of the chest showed dullness over a major portion of the upper lobe of right lung. Stethoscopic examination discovered complete hepatization of this region, with a mixture of crepitant, sub-crepitant and large moist rales around the boundaries of this space. I decided that this was a case of localized or lobar pneumonia, and treated him accordingly. On my second visit found fever higher, cough more violent at times—in general terms, the patient was worse. On my third call found him unexpectedly much better. His parents brought to me this head of timothy grass, which he had coughed up during the latter part of the night. When it was first expectorated it was mistaken for a part of the lung tissue, being covered, as it was, and entirely hidden within a large mass of thick bloody mucus. They placed the substance thus brought up in water, and with little washing soon discovered this timothy head. On my questioning the young man now, he called to mind that the afternoon before he was taken ill, he and his brother were scuffling on the haymow, and that at that time he had a head of grass in his mouth. When the scuffle was ended the timothy head was gone, but he supposed he had let it drop from his mouth during the struggle, never for once thinking he had drawn it down his throat. In fact, he thought no more about the circumstance till after the timothy so very unexpectedly made its appearance. But during the same night he was kept awake more or less by a dry, hacking cough, which he called a tickling in the right lung. Next day he was about the house, but towards night had a slight chill followed by fever. This fever gradually increased, as did also the cough. Next day for the first time there was noticed some bloody expectorations. This alarmed the parents, and medical aid was asked, and thus I saw him.

The great peculiarity of this case is the complete absence of cough, or bronchial or laryngeal irritation when this foreign body was taken into the lungs. The cough was gradually developed. The timothy head must have gone down stem end first, and been drawn in with a very strong inspiration, and lodged at once low down in one of the smaller bronchi, where sensation is not very acute. It was simply the gradually developed inflammation consequent upon the irritation of this foreign substance, that brought on the cough, and not the primary effect.

I can take no credit to myself, whatever, in the bettering of this man's condition. His recovery was nature's own cure. Within five days from the expulsion of this grass head, the patient resumed his usual work, nor has his lung ever troubled him since, thus showing that whatever ulcerative process was initiated in the lung tissue, soon completely healed.

In Dr. Watson's Practice of Physic, American edition of 1858, at page 731, you may find a case recorded somewhat similar to this, only that it was known when the head of rye was drawn in, and that the patient died. The rye stem was found after death in a large abscess of the lung.

Any one interested in this class of cases should read Dr. Gross' classical work on foreign bodies in the air passages. Also, in Vol. IV of Ziemssen's Cyclopædia of Medicine, the article by Dr. Riegel on the same topic, which is prefaced by an extensive bibliography of this subject.

THREE CASES OF PUERPERAL CONVULSIONS.

Read before the Southern Michigan Medical Association by Dr. H. Peters, of Tecumseh.

PUERPERAL convulsions, three cases, all primipara, and all occurred within seven months time. The first in September, the second in December, and a little north of east, three and one-half miles from the first, and the third three and one-half miles from the second or seven miles from the first, and in the same direction, the fall of the country and the surroundings being about the same. Were they caused by some peculiar influence (endemic)? If so, what? No more cases in that locality at or near that time.

Mrs. H., aged twenty, short and thick set, and quite plethoric. Had been well all through gestation; bowels regular; appetite good, and she did her own housework. Was taken with labor pains on the morning of the 28th of September, and they continued regular through the day. I saw her towards evening; six o'clock made an examination; found the os uteri nearly dilated; head presentation and first position. At about eight o'clock P. M., the membranes ruptured, and the amniotic water, about medium quantity, drained off. Then for nearly two hours pains hard and regular, and the head began to descend into the pelvis. At about ten o'clock she had a very hard convulsion, and I opened a vein and bled freely; took thirty ounces. The convulsions returned several times. I sent for the forceps, but before they came she was delivered by the natural pains; child, a boy, and it weighed eight pounds. The secundines came away soon; she flowed quite freely; applied cold to the head, and sinapisms to the calves of the legs. Gave ether and valerian, and ordered a cathartic; convulsions ceased and she made a good recovery.

Mrs. M., age twenty-two, of light complexion and quite tall; not very plethoric. Had not taken any medicine up to the time I saw her, which was on the morning of the 19th of December. Found her in convulsions; took twenty ounces of blood from the arm and gave ether and valerian. Applied cold to the head, warmth to the feet, and mustard to the legs. Gave a cathartic, five drops of croton oil, and in two hours gave an injection; soon got a good movement of the bowels; then gave one-sixth of a grain of morphine, and eight grains of bromide of potass. every four hours. Last convulsion, two o'clock P. M.; no labor pains, and on examination found the os not dilated nor dilatable, and she went two weeks and was delivered; child dead; no more convulsions.

Miss W., age seventeen years, not married, short and light; had had some headache for two weeks; was taken with labor pains on the eighth of March, about one o'clock A. M. I was sent for about nine in the morning, when the messenger that came for me said she was dying, and requested my attendance immediately. Took the forceps and arrived fifteen minutes before ten. Found her in convulsions. Bled; took twenty ounces; applied cold to the head; made an examination; found the mouth open, ruptured membranes, and applied the forceps and delivered child; weighed nine and one-half pounds; placenta came away soon; gave ether and valerian, put mustard to the back of the neck and on the legs, and kept the feet warm and the cold to the head; gave a cathartic, and ordered if the bowels did not move in three hours to give an injection. At the expiration of the time, gave the injection, and got two large stools. I left at two P. M. She had had no fits for an hour, and was some conscious. At six P. M. a messenger arrived and said she was having more of the fits.

I saw her soon after, and gave one-fourth of a grain of morphia and ten grains of the bromide of potass., and ordered it given every four hours. The convulsions soon ceased, and I left. Saw her in the morning, and found her very comfortable. She had had no more fits, and made a quick recovery.

RELATIONS OF CHANGES IN THE VASCULAR SYSTEM TO DISEASES OF THE KIDNEYS.

By A. R. Smart, M. D., of Hudson.

SEVERAL years ago Dr. Bright, of London, described a form of chronic disease of the kidney which has since borne his name. Not long afterward he noticed a certain series of changes which were found to occur in the heart and arteries in connection with the state of the kidney. Ever since the investigation of Dr. Bright, the phenomena described by him have enlisted the attention of clinical observers, as yet without having arrived at determinate conclusions concerning them. Improved methods of investigation have led to the discovery of many different yet allied conditions of the kidney, so that the term "Bright's disease" no longer conveys a definite idea of the pathology of the disease in question. Dunglison defines Bright's disease to be a granular degeneration of the cortical part of the kidney, characterized by the secretion of urine of low specific gravity, containing albumen. This was the disease described by Dr. Bright, but to day we find authors talking of desquamative nephritis, tubal nephritis, interstitial nephritis, large, smooth, white kidney, fatty kidney, amyloid and cirrhotic kidney, waxy kidney, and even other refinements of classification, all classed under the general term Bright's disease. For the purpose of rendering the consideration of this subject more clear, I may be permitted to call to mind the anatomical structure of the secreting portion of the kidney. This, it will be remembered, consists of a congeries of convoluted tubules ramifying through the cortical part of the gland, known as uriniferous tubes. Each of these tubes finally terminates in a pouch-like enlargement, which encloses a tuft of blood vessels known as a *Malpighian tuft*, forming its capsule. Each tuft consists of an afferent artery, which enters the tuft from the outside, piercing the capsule and then breaking up into a series of capillaries. These finally merge into the finer branches of the efferent venous radicles. These joining in one vessel, leave the tuft to spread out on the surface of the tube below. The tubule is composed of basement membrane lined with glandular epithelium, and is closely invested with the fine capillary plexus of vessels coming from the efferent vessels of the tuft. Outside of this capillary structure is the interstitial connective tissue or matrix—a fine, transparent, granular substance—the larger vessels receiving an investment from the fibrous capsule covering the kidney and prolonged inward to surround them. The glandular structure lining the tubes is the seat of secretion for the solid constituents of the urine, while the watery portion comes by exhalation from the vessels of the Malpighian tuft, the watery part of the urine being derived from the blood as it first enters the secreting apparatus, and the solid matters from the blood surrounding the tubes. It will be noticed that the functions and structure of these portions of the kidney are widely different. The similarity of structure between the liver and kidney will also be noticed as having a bearing upon the nature of some diseased conditions to which both organs are liable. Very many classifications of the chronic diseases of the kidney have been made, and not a little confusion has arisen in this manner. Dr. Gull gives three varieties, viz: catarrhal, gouty and cachectic. Flint makes five classes: desquamative nephritis, acute or chronic, large white kidney, fatty kidney, cirrhotic and amyloid degeneration. Lancereaux divides into four classes—interstitial, epithelial, fatty and amyloid—but says the last two are but related forms of the first two. It would seem most rational to adopt a classification based upon anatomical and functional features. Pursuing such a plan, Bright's disease of the kidney may be classed under two heads, viz: the catarrhal or desquamative inflammation, either acute or chronic, and the gouty or interstitial. Other classified forms may very properly be considered as phases of one or the other of these types. These two varieties of disease are as dissimilar as are the structures involved, the locality of the one being within the convoluted tubules, and of the other the intertubular tissues and the fibrous envelope of the vessels. By the catarrhal inflammation is implied the desquamative nephritis of some writers, the tubal nephritis of Dickson, and the catarrhal nephritis of Gull. Its seat is the glandular epithelium lining the tubules. The inflammatory process is generally acute (although it may become chronic), runs a somewhat rapid course, and usually ends in recovery. Its cause, interference with the action of the skin and the sudden accumulation in the blood of poisonous or effete substances, as in the eruptive fevers, or by the rapid ingestion of poisons which seek the kidney as their outlet. The functions of the skin and kidneys are complemental. The lessened action of kidney when the skin is acting freely, and its increased action when the surface is chilled, are familiar examples. The kidney is a very vascular organ, serving as the main emunctory of the system, and receiving blood largely in accordance with that demand. During the continuance of any of the above causes, the functional activity of the organ is greatly overtaxed, and what is a normal physiological congestion passes readily over into pathological congestion and inflammation. In some instances, no doubt, this is in part a result of the irritant action of the substance excreted, as in the eruptive fevers, noticeably scarlatina. Here the functions of the skin have been interfered with by the presence of a poison peculiarly irritating, and of course more work is thrown on the kidneys. The goaded excretory action, coupled with the character of the matters excreted, soon derange their functions; the Malpighian bodies become engorged, and their circulation finally arrested; the epithelial structures are irritated, swollen and diseased, the tubes blocked up with albumen and diseased epithelium; exhalation is diminished; the fluid constituents of the urine are lessened, with anasarca as a result; the glandular structure no longer removes from the blood the solid constituents of the secretion, and they accumulate in the system, causing drowsiness, stupor, convulsions, nausea and other evidences of poisoning of nerve centers.

These phenomena, constituting the condition of acute desquamative nephritis, may and usually do pass off with the disappearance of the exciting causes, and the circulation through the tufts becomes restored, the urine presents its usual quantity and appearance; in other instances the secreting power of the kidney remains permanently damaged, and the condition, though improved, remains in part as chronic desquamative nephritis. This state of the organ may result in the large, smooth, white kidney, or in fatty degeneration—changes arising from long continued disordered nutrition.

Here let us notice, in passing, that the kidney lesions so common in the exanthems and in diphtheria should be considered as an essential part of the disease, and not as an accident to be ascribed to cold or some other cause. It is probable that few if any cases of scarlatina run their course without kidney lesion. This class of diseases, viz., the catarrhal lesions, although involving the system profoundly in some directions, do not give rise to noticeable or characteristic cardiac or vascular changes.

We come now to notice the second general division, viz., the granular or gouty kidney—the result of interstitial nephritis. This is the disease originally known as Bright's disease or granular kidney. The locality involved primarily is the intertubular tissue. This tissue, according to Lancereaux, is wholly distinct in origin, nature and susceptibility to diseased action from the intratubular structures, and is not often simultaneously involved. This state of the kidney is essentially chronic in nature. It is slow and insidious in development and progress, and is frequently far advanced before giving rise to marked disturbance of the general health. It is not ordinarily accompanied by anasarca or diminished secretion of urine, although when fully established the specific gravity of the urine is always low, and the organic constituents lessened more than in any other form of kidney disease. The kidney when the condition is marked presents a granular, contracted appearance; the arterioles are thickened; the intertubular tissue is the seat of fibroid deposit that by its contraction partially obliterates the tubules, which are found shrunken and atrophied. A marked and characteristic series of general phenomena are found in connection with this state of the kidney, prominent among which are disturbances of vision, dyspeptic symptoms, contracted spleen, evidences of derangement in nerve centers, sometimes convulsions, these conditions often being the first evidence of disease that attracts attention. A constant and peculiar change is also found in the heart and arteries, more especially the smaller vessels, the heart being hypertrophied mainly in the left ventricle, and the arteries found with thickened coats and calibre contracted. Galaban found that in sixty-six cases of interstitial nephritis all but ten had cardiac hypertrophy. The nature of the changes occurring in the retina and nerve structures appear to be those of inflammatory degeneration with fatty change. Robertson suggests that the nervous symptoms sometimes ascribed to uremia are really due to structural degeneration. The dyspeptic symptoms also have been shown to be connected with tubular degeneration of the mucous membrane of the stomach. Many different views have been and still are held concerning the causation of these general changes; as yet no definite conclusion has been reached, and the question must be regarded as an open one. A theory of which Dr. Johnson is the chief exponent, and which was the view held by Dr. Bright, is that the kidney lesion is the initial disease. Dr. Johnson even disputes the idea of fibroid change and denies the existence of fibrillated connective tissue between the tubules. The presence of a certain amount of connective tissue is admitted by all observers, but a few like Dr. Johnson deny that it may become the seat of fibroid deposit. They regard all the general degenerative changes found in chronic Bright's disease as consequent upon the retention in the blood of effete matters which the kidneys have from disease of their glandular portions been unable to remove. The granular appearance of the kidney they ascribe to the remains of shrunken, atrophied tubules, rather than to fibroid deposit. They explain the cardio-vascular changes by supposing that the impure state of the blood excites an effort on the part of the arterioles to arrest the current of blood in its onward flow to the tissues. It is an established fact that these vessels act as stop-cocks to regulate the circulation, and that they will, when the blood is loaded with effete, noxious matters, contract from the reflex stimulus of the vaso-motor nerves and obstruct the onward passage of the blood. This is seen in the capillaries, in the circulation of unaërated blood, or in cholera.

This contraction by its long duration induces hypertrophy of the muscular wall of the vessel, while the continued resistance offered to the circulation induces hypertrophy of the left ventricle from its efforts to overcome it. The secretion of the kidney being impaired, less blood is demanded in that organ, and the arterioles contract to lessen the supply, which contraction, as in the general system, induces thickening and hypertrophy of their coats. The structure of the blood vessels may, it is claimed, become diseased as a result of the perverted nutrition induced by the kidney lesion, and finally becoming so weakened that they cannot resist the extra strain brought to bear by the hypertrophied heart, will rupture. Thus it is that apoplexy and hemorrhages are frequent accompaniments of granular kidney. This, in brief, is the theory of Dr. Johnson, and the one held by a large number of observers of to-day.

To this explanation it may be objected, that if the general changes, and especially the cardio-vascular lesions, were solely dependent upon the blood-poisoning consequent upon defective excretion in the kidney, we might expect to frequently meet them in other forms of kidney disease, which is not the case. It is true the elimination of organic constituents of the urine is not so largely interfered with in other forms of disease as in the granular, yet it is largely arrested, and without such complication. Galaban found that in chronic tubular nephritis not one-half presented cardio-vascular changes, and these only after the existence of the disease for a long time, and when presumably the interstitial tissue had become involved. Practically these changes are confined to the cases giving evidence of interstitial disease. The same objection may be urged in reference to the retinal degeneration and to the structural changes that are seen in other parts of the system.

Second, that these accompanying degenerations are almost entirely confined to that form of kidney disease which most often results from the action of causes which tend to produce the same conditions independently of kidney lesion, viz., the excessive, constant use of alcohol, and the persistent presence in the blood of irritant substances of any description.

Third, instances are recorded where in young persons the kidneys have been the seat of granular degeneration that produced fatal uremia without exhibiting cardio-vascular change.

Fourth, the degenerative changes in the vascular and nervous systems are frequently well advanced, while the only evidence of kidney lesion is urine of low specific gravity, but free from albumen or epithelial cast, and not presenting any marked evidence of advanced epithelial degeneration. Not unfrequently failing vision from retinal degeneration has been the first symptom to attract attention. Another class of observers, prominent among which are Drs. Dickinson, of London, and Grainger Stewart, of Edinburgh, believe granular kidney to be a true cirrhosis—a hyperplasia of the connective stroma of the organ, which may occur in all forms of chronic kidney disease when sufficiently prolonged. Dr. Stewart says he has observed thickening of the muscular coat of the arteries in many of the chronic cases, whether inflammatory or cirrhotic, while in true cirrhosis he has never failed to find hyperplasia of the connective tissue.

Another theory of the pathology of granular kidney, which has of late attracted considerable attention, is that advanced by Drs. Gull and Sutton. They consider the kidney lesion to be only a part of a general degenerative condition which they term *arterio-capillary fibrosis.* The granular state of the kidney they ascribe to the deposit of a fibroid or hyalin-fibroid material in the intertubular spaces, which has a tendency to contract and cause atrophy of the tubules. They say this formation commences on the outer surface of the vessels of the kidney and system generally. It may be found to some extent on the inner surface of the vessel, and is often seen with atrophy of the muscular or middle coat of the vessel. The vascular and renal changes they consider entirely independent each of the other, and while they admit that the kidney is usually involved, they state that the vascular change may exist without renal change. According to this theory, granular kidney is one evidence of a general condition characterized by a peculiar fibroid degeneration of the blood vessels, and with deposit in the connective tissue generally which may affect the kidney or may commence in and involve other organs primarily or wholly.

They believe the cardiac hypertrophy is induced by the morbid condition of the vessels, the hyalin-fibroid deposit impairing the elasticity of the vessel, requiring more effort to sustain the circulation. The retinitis, contracted spleen, emphysema, and degeneration of gastric tubules, found in connection with granular kidney are assigned to the same cause. In all these conditions they claim to have demonstrated the presence of fibroid deposit. The diseased state they believe to be a senile degeneration most common after forty years of age, although it may occur prematurely in earlier life. As tending to support this theory, Mr. Burdinell Castle says the retinal changes, which were supposed to be pathognomonic of renal disease, are not so, but may exist without renal change. Nor does he regard the retinal degeneration as a *result* of kidney disease, but supposes both to arise from some general cause and to exist sometimes independently.

When we consider these conflicting theories of the pathology of granular kidney and the evidence offered in their support, we are led to infer that the disease exists under varying conditions; that it may be found as a local disease and as a part of a general degenerative process; also, that the cardio-vascular changes found in connection with it are of two kinds, viz., muscular hypertrophy and hyalin-fibroid change. In fact, the two forms have been found associated in the same case. It is probable that granular kidney may occur in the course of tubular diseases of the kidney. That continued engorgement of a structure tends to produce hyperplasia of the connective tissue we have abundant proof. The occurrence of such change in the uterus, in the liver and in portions of the nerve structure affords examples. Granular kidney may thus arise as a result of the continued hyperemia incident to other diseases of the organ. Again, it may arise from systemic causes, which tend to induce hyperemia of the gland, and may occur primarily in the connective tissue. It is a disease essentially slow in the development and progress, and like its analogue, cirrhosis of the liver, would be likely to result from causes that were continuous in action and which tended to keep up a condition of vascular excitement—hyperemia in the kidney.

Among such exciting causes may be mentioned the continued presence of alcohol in the blood, the condition of plethora and the gouty habit. No doubt the more or less poisoned state of the blood which attends this disease when developed would act in the direction of producing vascular change, but both forms of related change of structure, viz., hypertrophy of heart and muscular coat of arteries and fibroid degeneration, may be excited by the same general conditions that cause the degeneration in the kidney. The presence of noxious and effete matters in the blood will excite the arterioles to unwonted contraction, which in its turn gives rise to cardiac hypertrophy. Besides this, the direct irritating action of such matters upon the inner surface of the vessels excites increased tension. Mahomed says the pulse of the exanthems, of pregnancy and of erysipelas does not materially differ from that of chronic Bright's disease. A French writer, whose name I do not recall, asserts that there is always hypertrophy of the left ventricle during pregnancy. This constant stimulation of the heart and arteries may not only cause muscular hypertrophy, but it may derange the nutrition of the walls of the vessel and induce fibroid or atheromatous change. Quain describes a form of cardiac hypertrophy due to interstitial change, and says the blood state may coöperate in producing it. One of the dangers incident to granular kidney is degeneration of the arteries, which, in connection with increased cardiac power, shall cause rupture of their coats. Moxon states that atheromatous change in the arterial coat is attributable to a slow form of inflammatory change ending in fatty degeneration. It is not improbable that this state of the vessels, as well as the degenerations which occur in the nerve tissue and in other organs, may arise in part, at least, from the blood state that excites interstitial change in the kidney, these organs suffering soonest and most frequently because of their exposed position as emunctories.

The arterio-capillary fibrosis of Gull and Sutton is to be regarded as a constitutional degenerative change, senile in nature and involving the kidney in common with other structures, the cause of which is at present not understood. Of the amyloid or waxy degeneration, which is an allied form of the interstitial, it is only necessary to say that it is not found except in connection with some constitutional cachectic condition. It is seen in connection with syphilis, chronic malarial poisoning, long continued suppuration or bone disease, and is to be regarded as a portion of a general cachectic degeneration.

Finally, we may state the conclusions which seem most tenable at the present: 1st. That the chronic diseases of the kidney known as Bright's disease are of two general types or classes, according to the structures involved, viz., the desquamative or catarrhal form, and interstitial or granular form, the latter form being the condition accompanied by cardio-vascular changes. 2d. That the remaining forms of degeneration are to be regarded as phases of these two varieties. 3d. That the general degenerative changes seen in granular kidney may exist incidentally to the renal disease, or they may be due to a general diseased process, of which the kidney disease is only a factor.

A practical deduction from these statements may be proper: 1st. In the diagnosis of desquamative disease we may be guided by the presence or absence of albumen in the urine, as well as by epithelial casts, while in interstitial disease we must use the urinometer instead of the test tube, as in this condition albumen is frequently absent, and but few granular casts are to be found in many instances, the most constant test being the low specific gravity of the urine. 2d. In cases of cardiac hypertrophy without valvular lesions, in failing vision not clearly dependent on other causes, or in cases of convulsion with stupor supervening suddenly, our attention should be attracted to the state of the kidney.

Abstracts from Virchow's Archives.

Prepared for the REVIEW by H. P. V. Petershausen, A. M., M. D., Ph. D.

XIX.—On Traumatic Keratitis. (Dr. Ernst Fuchs, of Vienna, Vol. 66. April, 1876.)

Traumatic keratitis has often been the object of study. Nevertheless, the results obtained by different investigators do not agree. This is the more to be regretted as an exact knowledge of the many changes occurring in its course is of great importance, and that not to the ophthalmologist alone. The correctness of Cohnheim's theory of emigration can also be tested by it. If the immigration of white blood corpuscles must really be considered as a principal symptom of inflammation, we will find it taking place in all tissues in an inflamed state. Even those tissues having no vessels can not be excepted. Cornea and cartilage are such tissues. They are excellently suited for experiments bearing upon this question on account of the transparency of their framework structure and its unchangeableness.

The Dr., wishing to strengthen our knowledge of the phenomena in question, studied all changes in the cornea following its irritation, until restitution of the tissue begins. He experimented only with the cornea of frogs brought artificially into an inflamed state, and found that the phenomena to be observed are the same at all times of the year, only the different phases occupy longer periods in autumn and winter than in spring and summer.

But before we go into the details of the author's researches on inflammation we must make ourselves acquainted with some of his remarks on peculiarities connected with the structure of the cornea.

The cornea of the frog consists of fibrillæ grouped into fascicles which form parallel layers that are termed lamellæ. The fibrillæ of every two lamellæ cross each other at right angles. The formative elements of the cornea may, on account of the peculiar arrangement of the latter, be divided into two classes, differing morphologically. The protoplasma of the cells of the one class has numerous prolongations, like the branches of a tree, that occupy the intercellular spaces in the cornea. The author calls them dendroclone (tree-like branched) cells. The cells of the other class have prolongations of which a part form lodgments occupying the interfibrillary spaces of the cornea, while another part is flat and placed between the lamellæ. These cells are called orthoclone (straight branched) cells. Between these two there are, of course, numerous intermediate forms to be observed.

If an orthoclone cell becomes irritated the prolongations (by which it is surrounded like a network) contract, and the cell assumes the form of a globe. The orthoclone cell-form prevails in the normal cornea. But as soon as the cornea gets irritated, when, for example, it is brought under the influence of a temperature of 160° F., the dendroclone form appears most perfectly.

The wandering cells which were observed in the cornea have either a globular or a spindle-shaped form; the latter are called spears by the author. They were originally round cells which changed their form when wandering through the interfibrillary spaces of the sclera, which has no intercellular canals; but after they enter the intercellular canals of the cornea they may again become globular. These spears, as well as those formed from the cells of the cornea, show a lively growth, manifested by an increase of size, of the number of nuclei, and of the formation of new cells.

The Dr. caused the trauma in the cornea by the point of a red-hot needle, in consequence of which the cells next to the wound undergo disintegration. In their nuclei and protoplosma appear vacuoles filled by gases as consequences of the needle's heat. The cornea cells around this zone of vacuoles answer to the irritation by turning darker a few hours after the cauterization, and by (*primary*) proliferation. Nucleus and protoplasma of those cells form mostly a group of spears, not so often globular cells. The zone in which this takes place is called the zone of irritation. About six hours after cauterization commences the immigration of white blood corpuscles to this zone, and twelve hours later the first spears arrive there. The largest number of wandering cells arrive in the zone of irritation about twenty-four hours after cauterization. They all accumulate near the eschar. The number of these wandering cells is from 20 to 100 times larger than that of the new element formed in loco. This state of the cornea must be considered as the acme of the inflammation. All new cells disappear from the cornea a few days afterwards; they probably wandered to the surface of the cornea and mixed with the secretion of the conjunctiva. Now, only the framework tissue of the cornea is left in the zone of irritation and serves to enlarge the eschar. Meanwhile, a number of cornea cells are floating towards the margin of the zone of irritation, which phenomena may be first observed three days after cauterization. The locomotion is caused by a stronger current of the lymph in the intercellular canals of the cornea. The floated cells transform from the seventh day to spears, by which (secondary) proliferation then at last is lifted off the eschar.

Traumas of less importance, for instance slight scratches upon the surface of the cornea cause first a change of the form of their cells, which is followed by their death, after which the phenomena of inflammation as above described are to be observed.

XX.—On Cauliflower Excrescences. (Dr. H. Reigel, of Vienna. Vol. 66. April, 1876.)

The author had seen two cases of cauliflower excrescences, which had the like external appearance. He examined both of them and found a great difference in their microscopical structure. This caused him to review the opinion of a number of authors on these growths. He arrives at the conclusion that there are described under the same name excrescences having a different structure. They have their seat generally on the os uteri. In most cases they occupy the vagina, and very seldom they grow into the uterus. If the growth is called forth by a degeneration of the papillæ it gets a papillary connective tissue structure and assumes in many cases at last a cancroid form. But if the growth is caused by a degeneration of the epithelium, there is developing from the very beginning an epithelial cancer. The Dr. describes such a case; he found among the epithelial cells a number of giant cells in his preparations, and considers this as a further proof that they do not form simply in tubercles, or are only the product of degeneration of the walls of vessels; he thinks that any cell may probably degenerate to a giant cell, either on account of rapid growth or decay or of both.

XXI.—On Disturbances of Circulation in the Liver. (Drs. Jul. Cohnheim and M. Litten in Breslau. Vol. 57. June, 1876.)

The granulated state of the liver in the later stages of cirrhosis is caused by the unlike intensity with which the atrophy of the acini is going on. It is certain that these atrophies are brought about by an obstruction of affluent vessels; but the peculiarities of the occurrence were unknown. By a number of experiments made for the purpose of solving this question, the authors obtained the following facts:

The liver can remain intact for a certain time without the afflux of blood by the portal vein, but this is not the case when the liver artery is shut up. The blood of the portal vein may be replaced to a certain degree by the blood of the liver artery. (Asp has demonstrated that the liver may produce bile simply from the blood carried by the liver artery, though of course in a less quantity.) The liver cells will uphold their integrity, even when principal branches of the portal vein are obstructed, if only the farthest interlobular veins are free. The afflux of arterial blood to the liver will probably never on account of an accident be cut off in men, for there are too many combinations of the network of liver arteries with other abdominal arteries.

From the related facts it will be evident that an obliteration of the portal vein is of no consequence with regard to atrophy in case of cirrhosis; the same is true of the arteries on account of their numerous anastamoses. There remain, then, only the interlobular veins, and their obliteration must cause atrophy and decay of the liver lobules; for, if they are obliterated neither the blood of the portal vein nor that of the liver artery can pass through the capillaries of the lobules. To produce this, only a slight pressure is necessary.

Reports of Societies.

MINUTES OF SOUTHERN MICHIGAN MEDICAL ASSOCIATION.

This association held its third annual meeting at Albion on Tuesday, July 11th. Owing to error in the issue of cards of invitation, but few members were present on the regular day, consequently the session was adjourned until Wednesday at four o'clock P. M., when the meeting was reöpened by the president, Dr. P. T.

Hamilton. The attendance was as good as could be expected under the circumstances.

Drs. Whelan, Stoddard and Smart were chosen committee on credentials, and reported favorably upon the following candidates for admission to membership: Dr. Arthur M. Haight, of Albion, graduate of College of Physicians and Surgeons, New York; Dr. A. M. Stephenson, of Adrian, graduate of Detroit Medical College. The candidates were elected.

Dr. Geo. E. Frothingham, of the University, was present by invitation by the secretary, and by vote of the society was invited to a seat near the president. He addressed the association in well chosen words respecting the attitude of the medical department of the University toward the department of homeopathy in the University.

Reading of minutes was dispensed with owing to the fact of their having appeared in print in DETROIT REVIEW OF MEDICINE AND PHARMACY.

Under the head of "unfinished business," Dr. Whelan, chairman of the committee appointed at the last meeting to define the relations to the association of those members who have moved from the geographical limits of the association, in conformity with the specifications of article nine of the by-laws, presented the following article, which was added, under the title of article XI, to the by-laws:

> ARTICLE XI. Any member of this association having removed from the geographical limits of the society, shall, on application to the president and secretary, receive a certificate of his standing at the time of such removal; and it shall be the duty of the secretary, whenever any such removal shall be reported to him upon authority believed by him to be good, to make a record of the fact, with the time, or at least the year of removal, upon the register of the association, so that the reading of such names may be dispensed with.

Dr. Smart, of Hudson, the only gentleman present from the three who volunteered to read papers on various topics made known in the minutes of the last meeting (see reprints), now read his paper entitled, "Relations of changes in the vascular system to diseases of the kidneys" (printed in REVIEW). The association then adjourned until eight o'clock in the evening, when, on calling the roll, the number of members present was found to be materially increased. Dr. Peters, of Tecumseh, read a paper based upon three cases of puerperal convulsions (printed in REVIEW). Dr. Whelan spoke upon the subject of puerperal convulsions. His second case in obstetric practice was complicated by eclampsia, and it left a decided impression upon his mind. Some two weeks ago he was called to see a lady expecting to be confined; found her with headache, eyes congested, pulse full; suspected convulsions; thought of bleeding, but did not; gave instead twenty grains of bromide of potass., to be repeated every thirty minutes, until headache was relieved. Several hours later learned that patient was in convulsions. On arriving at the bedside found that but one dose of the bromide had been taken; used his lancet and drew sixteen ounces of blood; made examination and found os dilated to the size of a penny; membranes had ruptured during the first convulsion; found no longitudinal uterine action. Gave chloroform, and controlled spasms with it; also gave wine, bromide and chloral, but they seemed to do no good. Succeeded in dilating the neck, applying the forceps and delivering. When the patient recovered from the chloroform she still continued unconscious for forty-eight hours, and after that complained long of vertigo; has now made a tolerable recovery. The doctor insists upon rapid delivery in preference to bleeding or anything else; says that under chloroform any os after the seventh month can be dilated safely; would use bromide of potass. in conjunction. In another case under his care, sixty grains of the bromide caused cessation of the convulsions.

Dr. Southworth, of Monroe, in speaking upon this subject, said that he would divide puerperal eclampsia into three classes, viz., apopletic, hysterical and anæmic. The first he would treat with twenty-drop doses of Norwood's tincture of veratrum, the second with bromide of potass. and musk, and the third with phosphorus and strychnia. In ten years' practice he has treated on an average three cases per year. Dr. Crosby, of Albion, said that he had also used the veratrum treatment with success; had combined morphia with veratrum with good results. His cases had all recovered with one exception, and in that the patient had forty convulsions. In another case Dr. Crosby bled, gave veratrum and calomel, found the os would admit index finger; a fœtus of seven pounds was delivered spontaneously; stupor continued forty-eight hours, and four weeks elapsed before patient recognized any member of her family.

An interesting discussion upon the subject of veratrum, particularly its dosage in puerperal convulsions, then followed. Some of the members had exhibited it in drachm doses. Dr. Stoddard, of Albion, read a paper entitled "Foreign body in air passages, with spontaneous recovery" (printed in REVIEW).

Dr. I. E. Brown, of Monroe, reported verbally two cases of spinal curvature treated by the plaster of paris method, lately advocated by Dr. Thayer, of New York, before the American Medical Association. He says that his cases are doing well, and as one of this society's delegates to the American Association, he gave the society an extended resumé of Dr. Thayer's remarks on curvatures of the spine, and exhibited his apparatus for suspension previous to the application of plaster of paris.

Drs. Watkins, Minchin and Peters were appointed committee to nominate officers for the ensuing year, and to propose place for holding the next meeting. The following gentlemen were selected and elected to the offices by ballot: President, Dr. Charles T.

Southworth, of Monroe; vice-president, Dr. John P. Stoddard, of Albion; treasurer, Dr. I. T. Hamilton, of Tecumseh; secretary, Dr. Hal C. Wyman, of Blissfield.

Dr. Southworth, after being elected, was invited to the chair by the retiring president, Dr. Hamilton, and thanked the society for the honor conferred upon him.

Dr. Hamilton, upon his retirement from the administration of the society, delivered an appropriate address (published in REVIEW). The following committees were announced by the president.

Committee on Ethics and Grievances—Drs. Whelan, Smart and Minchin.

Committee on Public Health and Hygiene—Drs. Jones, Buch and R. Stephenson.

Committee on Epidemics and Endemics—Drs. Cutler, Peter, Laverty and Watkins.

Committee on our Relations to Jurisprudence—Drs. A. Stephenson and Crosby.

Society adjourned to meet at Hudson on the second Tuesday in December, 1876.

Condensations from our Exchanges.

PRACTICE OF MEDICINE AND THERAPEUTICS.

DYSENTERY—ITS ABORTIVE TREATMENT.—Dr. David Prince (*St. Louis Med. Jour.*, September, 1875) strongly recommends, as best meeting all the indications for treating acute dysentery, large doses of salts combined with full doses of chloral hydrate. Of the former he gives two ounces sulphate of magnesia combined with thirty grains of chloral. The physician must administer the dose himself, and if this is rejected another must be given immediately. Smaller doses than these are worse than useless. Sleep and free watery evacuations follow this dose. No further medication is needed except quinia and iron. [This may be good treatment, but the dose—ugh! Heroic and nauseous enough to suit the most conservative old-time practitioner.—ED.]

CHOLERA INFANTUM—ITS PATHOLOGICAL CONDITION.—Dr. E. W. Emerson (*Boston Med. and Surg. Jour.*, July 27) says that the clinical phenomena of cholera infantum demonstrate that its main pathological condition is "an entire change of the equilibrium of the circulation, namely, engorgement of the abdominal at the expense of the peripheral and respiratory organs."

CHOLERA INFANTUM—ITS TREATMENT.—Dr. E. W. Emerson (*Boston Med. Jour.* July 27, 1876) gives the following views respecting the treatment of cholera infantum. The indications are:

1. To correct the dangerous and unfair distribution of the blood in the body, to which the purging, vomiting, cramps and coldness seem to be directly due, and later the greater danger of coma, convulsions or paralysis of the heart.

2. Failing in this, or not succeeding until too late, we should supply the water and perhaps the salts drained from the blood, as the thickening of the blood would prevent the good effects of a natural turn of the disease, and perhaps dispose to various organic lesions.

3. We should attend to the general hygiene, diet, etc., of patients.

To meet the first indications he recommends either a hot bath of from 99 to 104° F. or hot mustard packs. Some cases treated by the writer in this way did admirably. They were suddenly wrapped to the chin in cloths wrung out in hot water and mustard, with a blanket outside, and fed with ice water and a little brandy. This was continued for a half hour or more; the mustard sheet then withdrawn and the child left enveloped in the warm, moist blanket. The second indication is fulfilled by feeding constantly with ice or spoonfuls of ice water, or small enemata of salt water after a dejection.

CHLORATE OF POTASH—ITS EFFECT ON THE KIDNEYS.—Dr. A. Jacobi (*New York Med. Jour.*, December, 1875) says that this drug has a marked effect on the kidneys. To a patient suffering from sore throat he ordered one ounce and a half of the chlorate of potash in solution as a gargle. By mistake the patient swallowed it, and in a few days died of nephritis. Dr. Krackowizer lost a patient in a similar manner.

HYDATID CYSTS OF LIVER—TREATMENT.—M. Desnos (*Le Courier Med.*—*The Doctor*) gives a resume of his recent work on this subject as follows:

1. If the symptoms are not urgent it is worth while trying iodide of potassium.
2. At the end of some weeks, if this treatment fails of benefit, operative interference will be called for.
3. Capillary puncture and aspiration seems the most suitable method, to be repeated, if necessary, with care. This method may prove curative as well as serve in diagnosis.
4. Primary or consecutive suppuration of the cyst diminishes the chance of cure by capillary puncture and aspiration.
5. When the chances of cure are diminishing, and especially when the local or general disorder is becoming prominent, we must not hesitate to open the cyst freely, either by Recamier's method or with a large trocar, the canula to be left in the wound.
6. The operation must be followed by washing out the cyst and the injection into it of various solutions—of disinfectants or alteratives.

DIPHTHERIA IN MASSACHUSETTS.—The Massachusetts State Board of Health (report for 1876), from the facts reported by their correspondents throughout the State, deduce the following conclusions:

1. Diphtheria is contagious, and may be, under certain circumstances, highly so.
2. It is also infectious, although not to so great a degree as scarlet fever, measles and small-pox.
3. Where other circumstances assist, its spread is promoted by dampness or moisture of soil, whether naturally existing or produced, especially with a doughy, impervious subsoil.
4. The special connection between this disease and filth is not so clearly made out, although such a condition would undoubtedly aggravate the bad effects of moisture alone. The subjects of contamination of well water by human filth, and of the air of sleeping apartments by sewer gases, as predisposing causes of the disease, deserve more careful study in the future. Our returns do not at present give us sufficient data for the expression of a positive opinion.
5. Exposure to dampness and cold, especially among children and those otherwise predisposed to the disease, tends to induce diphtheria.

6. Americans and foreigners in Massachusetts have been about equally subject to the disease, other matters than that of nationality being equal.

7. Individual or family proclivity, age and depression of the vital powers from any cause whatever are important factors in inducing this disease more rapidly and in a more fatal form when other causes are also in some degree present.

8. There is also some atmospheric condition, of which little is now known, the presence of which, even if not necessary, is at least important in the causation of diphtheria.

SYPHILITIC PHTHISIS.—M. Fournier (*Gazet. Hebdomad. di Med.—Lond. Med. Record,* July 15, 1876) concludes an elaborate lecture on the above subject with the following important axioms:

1. Tertiary syphilis can produce in the lungs lesions which either locally or by reacting on the general health simulate pulmonary phthisis.

2. These pulmonary lesions of syphilis are often amenable to specific treatment. However grave and important they may appear, they are far from being always beyond the resources of art.

3. Consequently when a case of pulmonary lesion presents itself, it is important, unless the existence of tuberculosis be quite certain, to ascertain if the lesion can be traced to syphilis. It is necessary always to bear in mind that syphilis is a possible cause of pulmonary lesions.

4. When syphilis can be suspected to be the cause, the primary indication is to prescribe specific treatment which in similar cases has been sometimes followed by the happiest results.

METHODS OF INCREASING OR DIMINISHING INTRA-THORACIC PRESSURE AT WILL WITHOUT ANY PRESSURE.—Dr. J. S. Cohen (*Med. and Surg. Reporter*, July 26, 1876) gives the following methods of obtaining the advantages of rarefied or condensed air:

1. Valsalva's method, a forcible movement of expiration with mouth and nostrils closed, increases the intra-thoracic pressure and has the same physical effect as the inspiration of compressed air, and the effect can be increased by external compression of the chest and abdomen.

2. Deep and prolonged inspirations with mouth and nose closed will expand the chest and rarefy the air in the lungs, and the effect is the same as that of the inspiration of rarefied air.

3. Expiration aided by external compression of the chest and abdomen has an effect similar to that of expiration into rarefied air.

AORTIC REGURGITATION TREATED BY DIGITALIS.—Dr. G. W. Balfour (*Edinburgh Med. Jour.*) says that in no other disease is digitalis of more value than in aortic regurgitation, and there is none other in which its curative action can be more sufficiently demonstrated than in this. The great danger in aortic incompetence is death from asystole, depending upon over distension of the left ventricle. As soon as any regurgitation takes place the interior of the left ventricle is (when the patient is in the erect posture) being constantly dilated by a force equivalent to the weight of a column of blood the height of the cranium above the heart, and of the diameter of the ventricular lumen. The hydrostatic pressure accordingly increases with the gradual dilatation of the ventricle. Now the value of digitalis consists in this—that by its judicious administration it can produce such an amount of tonic contraction of the ventricle as shall rather more than counterbalance the dilating power of the arterial column. In order that this effect may be produced, the drug requires to be given freely to cause a certain amount of contraction of the apex and diminution of the cavity of the ventricle. There is no danger of pushing the drug too far so long as the flow of urine continues free. If the quantity of urine begins to fall and the pulse commences to thump or falter, the drug should at once be discontinued.

CONTRACTED PUPIL IN HEART DISEASE.—Prof. Giovanni (*Annali Univer. di Med.—Brit. Med. Jour.*) gives us the results of a careful study of three cases of advanced heart disease accompanied with bilateral myosis. Each case was accompanied by severe dyspnœa. One case was mitral narrowing and insufficiency; one aortic narrowing with valvular insufficiency, and one aortic stenosis with mitral insufficiency. After dwelling on the various facts respecting the innervation of the pupil, the author says: "Myosis has a very distinct significance; it does not only indicate stasis of the blood, but a profound lesion of the ganglionic cells, thenceforth paralyzed. The ganglionic lesion affects equally the heart and the lung, to the innervation of which the ganglionic cells contribute. The cardiac activity and pulmonary circulation are therefore more seriously affected than in other cases when myosis exists. Thus myosis in cardiac affection is a symptom of very grave prognostic value, as it announces the presence of a lesion of the ganglia of the sympathetic which tells upon the heart itself and the lungs.

PALPITATION OF THE HEART—METHOD OF INSTANTANEOUSLY ARRESTING IT.—Dr. J. Lardies (*L'Union Med.—Clinic*, November 20, 1875) describes a method by which palpitation of the heart not due to organic lesions may be arrested at once. The patient is directed to bend the body, head down, and the arms hanging so as to momentarily cause congestion of the upper part of the body. In all cases of nervous or anæmic palpitations the heart quickly resumes its normal functions. If respiration be arrested for a few seconds while the patient is in the above position, the relief is still more speedy.

RAW ONION AS A DIURETIC.—Dr. G. W. Balfour (*Edinburgh Med. Jour.*, September, 1875) records three cases in which much benefit was afforded patients by the eating of raw onions in large quantities. They acted as a diuretic in each instance. Case first was a woman who had suffered from a large white kidney and constriction of the mitral valve. Her abdomen and legs had been tapped several times, but after using onions as above she had been free from dropsy for two years, although still suffering from albuminuria. Case second suffered from cardiac disease, cirrhotic liver and ascites. Case third had ascites depending on tumor of the liver. In both of them the remedy had been used with good results. Both had been previously tapped, purgatives and diuretics alike having failed to give relief. All other treatment having failed to give relief, recourse was had to the onions. Under their use the amount passed steadily rose from ten to fifteen ounces to seventy-eight or a hundred.

PHYSIOLOGICAL ACTION OF REMEDIES

GELSEMIUM SEMPERVIRENS—ITS ACTION.—Dr. S. Ringer (*London Lancet*) shows by experiments that

1. In animals gelsemium primarily affects respiration.
2. It reduces the frequency of the respiratory act.
3. The affection of respiration appears before the paralysis and passes off earlier.
4. Gelsemium causes death by asphyxia.
5. If artificial respiration be maintained until the drug can be eliminated, recovery will take place.

Such being the facts, what is their explanation? The answer is given by Dr. Burden Sanderson in succeeding numbers of the *Lancet*. He finds that when given in fatal doses gelsemium causes death, as in poisoning by curare, by gradual arrest of the respiratory movements. Facts further show that this result is not, as in the case of curare, to be attributed to suspension of the functions either of the motor nerves or of the muscles to which they are distributed, so that the conclusion can hardly be avoided that this agent exercises its influence directly on the cerebro-spinal centers, and particularly on those parts which preside over the rythmical respiratory movements. He further finds that the drug acts on the respiratory function by paralyzing the automatic respiratory center, but that the process of extinction of the respiratory movements, which might otherwise be expected to be gradual and progressive, is prevented from being so by the intervention of disturbances of which the explanation is to be found in the imperfect arterialization of the circulating blood.

Tartar Emetic—Its Action.—Dr. Angelo Mosso (*Lo Sperimentale—Jour. Nervous Diseases,* July 1876) from a lengthy discussion concludes:

1. Tartar emetic causes vomiting in two different ways—by exciting the terminal ramifications of the pneumogastric, and by acting on the nervous centers.
2. In poisoning by tartar emetic the pulse for a time preserves its rythm and normal frequency; then it becomes accelerated and the arterial pressure is reduced; a little later the pulse becomes irregular and presents now and then periods of slowing which correspond with attacks of epileptiform convulsions. This intermittent slowing of the cardiac pulsations seems to be dependent upon a strong irritation of the vagi, for if the vagi be divided during an attack, the pulse becomes at once very rapid and preserves its frequency till death. Other experiments show that it is through the vagi that the influence of the emetic is transmitted to the heart.
3. In animals killed by tartar emetic we find the mucous membrane of the stomach, the duodenum and the liver strongly congested. The cavities of the stomach and intestines often contain a great quantity of mucous and serous liquid. These phenomena are due to the irritation of the vaso-dilator filaments of the pneumogastric.

SURGERY.

Drainage of the Eye Ball.—Dr. D. Wecker (*Brit. Med. Jour.,* July 15, 1876) has introduced another new operation in ophthalmic surgery. It consists of a system of drainage effected by the introduction of a piece of gold wire through the membranes of the eye, which is so arranged that the patient is in no way inconvenienced by its presence. This new method is applicable to all cases in which the drainage of a liquid from the eye would be indicated, such as hydrophthalmia, staphyloma, detachment of the retina, absolute glaucoma, etc. Thus far the results have been sufficiently encouraging to induce him to persevere.

Meniere's Disease—Its Clinical Phenomena.—Prof. Hardy (*Paris Medicale—London Med. Record,* July 15, 1876) gives an admirable description of the above disease, as follows: Individuals who suffer from this disease are always the subjects of previous deafness which dates back to a greater or less time—to some months or longer. Besides this, before the special attack which characterizes this disease manifests itself the patients generally experience tinnitus and buzzings in the ears, sometimes cephalalgia. In some persons these phenomena undergo a certain amount of recrudescence before this attack, then supervenes the dominant phenomena constituted by the vertigo—that is, a sensation of whirling. Not only does it appear to patients that they themselves are turning round, but even the objects before their eyes seem to be carried away in a similar manner. With this sensation of turning there generally supervenes another phenomenon much more serious—a falling of the body, which is ordinarily forwards, sometimes backwards or to the right or left. Suddenly these persons are seized with an irresistible impulse which throws them forward and makes them fall, sometimes with great violence. The intensity of this phenomenon varies; sometimes the patients experience only a sensation of falling—the fall does not actually occur. If they be lying down the bed seems to them to turn over, sometimes from before backward, or from right to left, or left to right. At other times there is a real fall more or less violent in character. At other times it seems to patients as if the earth opened and they were precipitated into the gulf. Frequently there is a short loss of consciousness. It supervenes little by little, and is peculiar in that the patient can recollect perfectly the circumstances under which the attack occurred. More often there is nothing of this sort—only the vertigo and fall. In some cases vomiting, without any previous nausea, followed the attack. The attacks generally recur with more or less regularity. Generally there are many attacks, the disease lasting months or years.

Gall Stones—Discharged by the Side.—Dr. D. Perley (*Boston Med. Jour.*, June 22, 1876) reports a case with the following points of interest: A man, now aged 76, had for some years previous to 1869 suffered from pain in the region of the liver. An abscess formed during 1869 in right hypochondrium. Symptoms were so alarming that it was opened. Pus and bile were discharged for about a month, when an eruption of gall stones began to discharge from the aperture. These continued at intervals till December, 1876, when they ceased. He is now robust and able to attend to his business as a harness maker.

DISEASES OF WOMEN.

Croton Oil Paint in Pelvic Cellulitis.—Dr. Charles G. Budd (*American Journal Obstetrics*, April, 1876) says that he has found the treatment of pelvic cellulitis by blisters, iodine and oleate of mercury very unsatisfactory. Lately he has used, with happiest results, Corson's croton oil paint. R. Ol. croton, ʒ ij; ether sulph. fort., ʒ iv; tinct. iodine, ʒ ij; potass. iodide ℈j. iodine gr. x. Mix. In four cases, when a pelvic abscess seemed unavoidable, under the use of this paint the exudation fairly melted away.

Advances in Gynæcology During the Year 1875.—Dr. P. F. Mundi (*American Journal Obstetrics*, April, 1876), concludes an admirable report upon the progress of gynæcology during 1875, as follows:

1. Among those subjects in which the past year has witnessed an advance is that of the normal structure of the uterine mucosa before, during and after menstruation, the nature of menstruation, and its relation to ovulation.
2. The treatment of uterine fibroids by ergot, enucleation, traction, above all by gastro-hysterotomy, the percentage of recoveries from which operation (six recoveries out of nine operations) certainly seems to promise a bright future for this still much dreaded measure.
3. The vesico-vaginal and vesico-rectal touch, and the daily increasing popularity of the method of treating diseases of the female urethra and bladder by dilatation of the urethra and local applications.
4. The growing appreciation of the influence of posture on the health of the female sex, and the recognition of the value of posture, especially if aided by pneumatic pressure in the treatment of uterine displacements.

Lymphangitis in Pelvic Pathology.—From an exhaustive discussion of this subject, Dr. Tilt (*British Medical Journal*, June 20, 1874) deduces the following propositions:

1. Pelvic cellulitis, benign or septic, originates in the lymph spaces and in the capillary lymphatics, that have been wounded in some lesion of the utero-vaginal mucous membrane.

2. Whenever situated in the pelvis, cellulitis follows the same course, but varies in name and symptomatology according to its topographical disposition, and to the organs and the tissues that circumscribe it.

3. From the patch of capillary lymphangitis implicated in a mucous membrane lesion, inflammation may spread to one or more of the nearest lymphatics, and may be benign or septic.

4. One lymphatic may pass on inflammation to another, so that a continuous chain of purulent lymphatics may extend from the septogenetic lesion to the lumbar lymphatic glands. Such acutely inflamed lymphatics often inflame their surrounding cellular tissue, their glands and proximate organs.

5. When lymphatic glands do not succeed in barring the progress of inflammation, they also inflame their surrounding cellular tissue, and may thus cause an internal bubo wherever there is a pelvic lymphatic gland.

6. Occasionally peri-uterine inflammation has no other origin than this frequent origin of abscesses of the broad ligament.

7. Purulent lymphatics, on their way to the lumbar glands, may inflame the subserous cellular tissue in the iliac region, and thus cause iliac abscess.

8. The subserous lymphatics and the peritoneum are so intimately united by physical contact and physiological action, that it is almost impossible for subserous lymphangitis not to cause peritonitis.

9. The sub-peritoneal lymphatics being continuous with and contiguous to those of the ovary and the oviduct, they may be inflamed by subserous lymphangitis, particularly when it is septic.

10. The contamination of the blood by lymphatic pus leads to the inflammation of those parts that are in physiological connection with the lymphatic system, such as the serous and synovial membranes and the spleen, whilst phlebitis more frequently causes metartic abscesses, if it be not their sole cause.

11. Though often overlooked in *post-mortem* examination, sporadic puerperal lymphangitis is not uncommon, but is more frequently met with in connection with and concealed by phlebitis.

12. The worst cases of puerperal lymphangitis have their modified counterpart and subdued presentment in non-puerperal pelvic pathology, and more frequently than is admitted lymphangitis is the cause of speedy death from uterine operations.

13. Whether women be poisoned by puerperal lymphangitis or by puerperal phlebitis the general symptoms are the same in nature and intensity, and the local symptoms vary according to the amount and variety of its primary and secondary lesions.

14. The increase in size and number of pelvic lymphatics during pregnancy, and their increased functional activity strongly support the rule not to operate on pregnant woman.

15. As the liability to puerperal lymphangitis is in direct proportion to the number and gravity of lesions inflicted on the utero vaginal mucous membrane by tedious labors, it is advisable to shorten, according to modern practice.

16. The bathing of a puerperal wound in an ichorous discharge is so dangerous that disinfecting vaginal injection should be made so soon as the local discharge becomes in the least offensive.

17. The frightful mortality that has attended some epidemics of puerperal lymphangitis justifies the horror of large maternities entertained by the profession.

Editorial.

NOTICE TO CORRESPONDENTS, ETC.—Communications intended for publication, and books for review, should be directed to "Editors of Detroit Review of Medicine, care of E. B. Smith & Co., Detroit."

All remittances of money, all letters on the business of the REVIEW, pertaining to subscriptions or advertisements, should be addressed exclusively to the publishers. E. B. Smith & Co., corner Fort and Griswold Streets, Detroit, Mich.

Original Articles, Reports of Medical Societies, Observations, Correspondence, News, etc., of general interest, are respectfully solicited from every source. Articles should be practical and carefully prepared.

The Editors will not be responsible for statements made over the names of contributors.

DR. J. MARION SIMS VERSUS THE CODE OF ETHICS OF THE AMERICAN MEDICAL ASSOCIATION.

THE late president of the American Medical Association, in his annual address, took occasion to make a deliberate attack upon our code of ethics. He questioned its "validity" and its "constitutionality." Of course, in this land of free speech he only exercised his inalienable right: still, as this code is the organic basis of the association that did him honor by making him its president, the attack at such a time and place seemed out of taste, and unwise. Had his criticisms ended by suggesting a remedy for what seemed evil to him, it would have been different. Instead of tearing down that he might build better, he deliberately attempted to destroy our bond of professional union, with no apparent object beyond the satisfaction of accomplishing a work of destruction. After mentioning various objections to certain features of the code, he says: "I do not ask you to appoint a committee on the code. Let it stand as it is. Honorable men do not need its protection. Dishonest men are not influenced by its edicts." Now, we are not of the number who regard the code as perfect in all its provisions, nor do we deny the propriety of frequent searching criticisms of all its provisions; still, we insist that the code is entitled to respectful consideration, and until altered, its provisions should be respected by those who promise to obey them. Dr. Sims would have the code treated as a dead letter—not even examined by a committee before being cast into eternal oblivion. What reasons does he give for this disposing of a code which other branches of the profession out of the United States have adopted as their professional standard?

1. He says that the code renders it impossible for any member of the profession to notify the world of his intention to change his place of residence without violating its provisions.

2. Consultants do not obey the provisions of the code; differences of opinion will leak out.

3. Patenting of surgical instruments or other inventions is forbidden.

4. The profession violates the code every day in prescribing patent medicines.

5. The code is used as an engine of torture and oppression.

We had expected that Dr. Sims would have added one other reason for the abolition of the code, viz., because it forbids consultation with irregular practitioners.

Respecting his first reason we can find no basis for it in the code. Of reason second we must say that it seems poor logic to argue the abolition of a law because it is frequently disobeyed. If some consultants have not fulfilled this obligation in the consulting room, let us know who these men are, that we may discipline or avoid them in the future. At all events, we see in the violation of the law of consultation no reason for the practical abolition of the code. Concerning patents, it seems to us proper that the whole subject should be reconsidered in all its relations. But the necessity of reconsideration of one point does not make it plain why the entire code should be set aside. That Dr. Sims and others should prescribe patent medicines does not argue the destruction of that law which they once promised to obey, but simply their unfaithfulness to their promises or professions. Really, there is no excuse for any physician in his prescribing chlorodyne, McMunn's Elixir of Opium, the Tolu anodyne, etc. If they studied the materia medica and pharmacy as presented to us by honorable pharmacists, they would find an abundant variety of remedies which would more perfectly meet their wants than the patent medicines. To patronize and endorse the patent medicine man is to discourage scientific and honorable pharmacists, and is practically saying that our boasted science cannot compete with secret nostrums. Such charges against pharmacy and chemistry are utterly unwarranted, and libelous in the extreme. Respecting the last reason, that the code is used as an instrument of torture, we have this to say: that we first want the evidence that it is so used. If individuals that have freely given their assent to it should seek to evade its provisions, they should not call it torture if they were asked to account for their conduct.

From our careful study of this startling address we can find no adequate reason given by Dr. Sims why the code should not still stand as hitherto. In the single point respecting patents, we think it wise to re-examine the code. At another time we shall discuss this topic further.

At the close of the late meeting at Philadelphia, many gentlemen eminent in the profession remarked to the writer that never had the maintenance of the spirit and letter of the code been so popular in the profession. It was significant that those especially supported Dr. Sims' attacks upon the medical code who were engaged in some questionable practice, directly or indirectly forbidden by the code. The code of ethics of the American Medical Association constitutes its very life. Full well does the profession understand that the destruction of this code, without the substitution of another, means instant death to the association. There is no organization possible without a code of ethics, written or unwritten. If the association be large, and its members widely scattered, a written one is imperatively demanded. Such is the American Medical Association. It is our belief that the abolition of the code is impossible without not only destroying the American Medical Association and all large associations, but also impeding the progress of medical science. To discuss the provisions of the code, and to propose alteration, are always in order, but let none ever repeat the saying: "It is effete; let us lay it on the shelf, and a few of our prominent men will furnish the law."

MEMORANDA.

The *Index* will not admit any quack advertisements to its columns.

Stromeyer, the great German surgeon, died June 15, 1876, of apoplexy, at the age of seventy-two.

Diarrheal diseases are filth diseases—fecal diseases; remove the filth and feces, and they are prevented.—*Segur.*

The *Boston Journal*, July 27th, reports a case of death from ether, occurring in the practice of Dr. A. D. Sinclair.

Each full grown man in effect deposits his own dead, effete putrescible body in the vault of the privy once every forty days.—*Segur.*

The *Edinburgh Medical Journal*, June, 1876, says that the British medical students have no training on *physics* and know little of *organic chemistry*.

Dr. Alfred Fournier, the great European syphilographer, says "that syphilis is increasing in Paris." Apparently legislation here fails to stop its ravages.

The sanitary legislation of different countries resolves itself chiefly into the broad principle of attempting to provide clean air, clean water, clean food, clean soil, clean houses.

The general intelligence of any community may be safely inferred from the attention which they pay to removing all filth completely away, beyond the possibility of doing harm.—*Folsom.*

At its late meeting, the Wayne County Medical Society, of Detroit, adjourned *sine die*. Its effects were placed in the hands of a committee, of which Dr. A. S. Heaton is chairman.—*Free Press.*

The *Pacific Medical Journal* says that at the late meeting of the California State Medical Society, in San Francisco, the social and intellectual enjoyment of the supper was frustrated by the drunken rowdyism of certain individuals. The wise rule is either to abolish entertainments, or exclude all intoxicating drinks.

D. A. Gorton, M. D., an able homeopathist, in a work on medical philosophy, 1875, says that "sulphur is efficacious in obstinate contumacy, and in sin original or acquired; chamomile, in a fretful, peevish disposition; belladonna, in certain forms of temper diseases; hyoscyamus, in jealousy; nux vomica, in maliciousness, and stramonium in cowardice."

The Dean of the "Kentucky School of Medicine" says that this school imposes no restrictions as to time of study upon those seeking its diploma. The under-graduate period of the present 1876 graduating class varied from *less than one year* to six years.

The *Doctor*, July 1, 1876, says that "the General Council of Medical Education and Registration has met at an enormous cost. The members have frequented first-rate hotels at the expense of the profession, have talked of all sorts of subjects, and have separated without any decisive action to advance medical education, or render registration more valuable."

The eleventh annual meeting of the Washtenaw County Medical Society was held at Ypsilanti, June 28, 1876. The following officers were elected: President, W. F. Breakey, Ann Arbor; vice-president, S. W. Chandler, Saline; secretary, T. K. Owen, Ypsilanti; treasurer, J. Kapp, Ann Arbor; censors, C. Georg and D. McLean, of Ann Arbor, and C. Ultes, Manchester.

Harvey, the discoverer of the circulation, said that "to maintain friendship there shall be once in every year a general feast, and on the day of such feast there shall be an oration." The oration is to be "an exhortation to the members to study and search out the secrets of nature by way of experiment and for the honor of the profession, and to continue mutually in love." He left funds to provide such an annual feast and oration. The above is very suggestive to medical societies, and if practiced in its real spirit, it would be of incalculable benefit to those participating in it.

A physician, resident at Saratoga Springs, writes to the *Medical Record* concerning the ways of certain metropolitan practitioners who resort to that place annually. He says that they apply to the hotel keepers for the privilege of putting up their *shingles* in the hotel office; that they herald their presence there by circulars and announcements, and that having heard that a patient is sick in one of the hotels, under the charge of a resident physician, they send in their professional cards, announcing their presence in the village, and where they can be found." Evidently they hold no grave consultations over the easiest way of getting around the provisions of the code.

At an informal meeting of the undersigned, held in Philadelphia at the rooms of the section of practical medicine of the American Medical Association, Wednesday, June 7, 1876, after the election of a chairman and secretary, *pro tem.*, it was *Resolved*, To call upon such American physicians as had evinced a special interest in dermatology to unite in forming an American Dermatological Association; *Resolved*, That the meeting for organization be held in the University of Pennsylvania, Philadelphia, on Wednesday, September 6, 1876, at 6 P. M., or immediately after the close of the meeting of the section of dermatology and syphilology, of the International Medical Congress, on that day. Please signify your pleasure to the secretary at the earliest opportunity, and oblige, very truly yours, L. D. Bulkley secretary, *pro tem.*, 1 East 33d street, New York; Edward Wigglesworth, Jr., chairman, Boston, Mass.; Louis A Duhring, Philadelphia, Pa.; Lunsford P. Yandell, Jr., Louisville, Ky.; George Henry Fox, New York; J. E. Atkinson, Baltimore, Md.

Dr. E. B. Ward, of Jackson, Mich., an alumnus of the Medical Department Michigan University, writes us that he has received letters from all the principal colleges East as to whether they will take the tickets of Michigan University. With one exception (College of Physicians and Surgeons, New York) no action is reported to have been taken, and the College of Physicians and Surgeons gives no "guarantee" for future classes. Dr. Ward will furnish proof of the above on application to him. All societies and colleges, in so far as heard from, will receive the tickets from the above institution up to the end of the last session. Rush Medical College has given official notice that it will not receive them hereafter, so long as homeopathy is included in the instructions of that college, and other colleges have not decided that they will receive them. Preceptors of medical students, and the students themselves, will do well to make note of these facts.

Book Notices.

Any book noticed herein may be had of E. B. Smith & Co., Publishers and Booksellers, Detroit, Mich.

THE MEDICAL AND SURGICAL HISTORY OF THE WAR OF THE REBELLION. Part II, Vol. II. Surgical History. Prepared under the direction of Joseph K. Barnes, Sugeon-General U. S. A., by Geo. A. Otis, Assistant Surgeon-General U. S. A. First issue. Government printing office. 1876. Cloth. Pp. 1040.

This volume is divided into four chapters, each presenting the facts of a particular region. Thus, chapter six contains a tabulated account of eighty-five hundred and thirty-eight cases of wounds of the abdomen, and detailed abstracts of six hundred and ten of them. Chapter seven enumerates thirty-one hundred cases of wounds of the pelvis, six hundred and ten being detailed. Chapter eight tabulates twelve thousand six hundred and eighty-one cases of shot flesh wounds of the back, and gives abstracts of two examples. Chapter nine considers eighty-eight thousand seven hundred and forty-one cases of wounds of the upper extremities. Detailed abstracts are given of eight hundred and seventeen cases, the principal facts concerning thirty seven hundred and twelve excisions, and eighty-two hundred and forty-five amputations are concisely recorded in tabular form. The remainder of the cases are adverted to in numerical statements.

The illustrations are of the finest order, including fifty-two Woodbury-types and chromo-lithographs and seven hundred and forty-one wood-cuts. Upwards of thirty thousand reporters and operators have furnished the facts here recorded. One more similar volume will be needed to complete the surgical history of the war of the rebellion. Were it needed, this volume alone would effectually silence those chronic grumblers who so constantly seek to belittle the American medical profession. The surgeon-general and his able assistants have with great ability compiled the facts observed, but the observations in this volume alone were made by over three thousand different men. The number of observers whose work will be embodied in the total six volumes of the entire series will probably reach ten or twelve thousand. The honor of the work may fairly be ascribed to the profession at large. Surely, as "figs do not grow on thistles" the profession which can show such work cannot be inferior.

It is desirable that these volumes be issued in such a manner that all wishing may obtain them, as they constitute an invaluable reference library.

HAY FEVER—ITS NATURE AND TREATMENT. By Geo. M. Beard, A. M., M. D. Cloth. Pp. 266. 1876. New York: Harper & Brothers.

This book was avowedly prepared for the subjects of hay fever. Yet, the absence of technical phrases and terms will not offend the average medical reader. The work opens with a chapter on the history of the disease, beginning with Bostock, who, in 1819, first described it, and ending with Blackley's valuable researches, published in 1873. From this historical review he concludes that the disease is one of modern civilization; that no theory of the disease has been established because of a want of a sufficient number of facts, and one-sided views. The author's method of investigation is described fully in order that his results may be appreciated. Briefly stated, this method was by circular. These were carefully prepared and in a variety of ways sent over the entire United States. In this way statistics were obtained with reference to two hundred cases. As to geographical distribution, he found that it existed from Maine to the Rocky Mountains. No considerable district of this country aside from the mountains and the coldest regions of the North and Northwest, is entirely exempt. As to occupation, most were professional men. Hay fever belongs to the brain workers rather than the muscle workers. Over thirty special exciting causes of hay fever were cited — dust is mentioned in the greatest number of instances. Half the cases were relieved, in part or entirely, by a variety of remedies. We have not space for further quotations from his letters. Among the general conclusions drawn from these and other observations are the following:

(1) Hay fever is essentially a functional disease of the nervous system.

(2) "Rose cold," "peach cold," "June cold," "hay fever," "hay asthma," "ragweed fever," are but manifestations of one disease, most appropriately known as "summer catarrh," which may be subdivided into the early form, middle form or July cold, and later form or autumnal catarrh.

(3) Not being due to any single specific cause, no one remedy will be found to relieve all cases.

(4) The leading indications in the prevention and treatment of the disease are the avoidance of heat, light, worry, dust, vegetable and animal irritants and other exciting causes, fortifying the system by tonics before

and during the attack, and relieving the symptoms by those sedatives and anodynes, locally or generally administered, which are found by experience best adapted for each individual case.

This book was evidently prepared with great care—its new facts, broader generalization and philosophic spirit shed a new light upon this perplexing neurosis, and entitle it to a thoughtful consideration.

A PRACTICAL TREATISE ON MATERIA MEDICA AND THERAPEUTICS. By Roberts Bartholow, M. D., etc. Cloth. Pp. 538. 1876. New York: D. Appleton & Co.

In giving his reasons for adding another to the existing works on the above topics, the author says that for several years he taught materia medica and therapeutics, illustrating his lectures by experiments on animals; that from experiments in his private laboratory he has contributed some original knowledge to the subject of therapeutics, and that for twenty-two years he has been a practitioner of medicine. It differs from other works on materia medica in its scheme of classification, in the list of subjects discussed, and in the character of its information. "All botanical and chemical details are omitted unless necessary to elucidate physiological questions or to facilitate intelligent prescription writing." For pharmaceutical questions the reader is referred to the Dispensatory of Wood and Bache. In giving the physiological action of drugs he has condensed in a connected description that view which he has deemed most consonant with facts. The list of authorities is placed at the end of each article.

The therapeutical application of remedies is as far as possible based on physiological action, but well established empirical facts are also given, even when inexplicable by any known physiological properties of the remedies discussed. The book is divided as follows:

(1) Modes in which medicines are introduced into the organism.

(2) The actions and uses of remedial agents. (*a*) Those used to promote constructive metamorphosis. (*b*) Those used to promote destructive metamorphosis. (*c*) Those used to modify the functions of the nervous system. (*d*) Those used to cause some evacuation from the body.

(3) Topical remedies. This scheme is certainly a simple one, and enables the author to "follow the action of the medicine from its introduction into the stomach to its exit through the organs of excretion."

The chapter on aliments is one of the most carefully elaborated and valuable. In our judgment it is worth to every practitioner vastly more than the price of the entire book. Not only are the properties of food in building up and tearing down a healthy body shown, but the uses subserved by these properties in various diseases. In our judgment we have only just begun to learn the value of food as a remedial agent, but we are rejoiced that even this little should be compiled and presented to the profession in its appropriate form.

Other agents promoting constructive metamorphosis are, water, lactic acid, mineral acids, oils and fats, phosphorus and some of its compounds, iron and its preparations, manganese, chalybeate mineral springs, bismuth, arsenic, simple bitters, eucalyptus, hydrastis and cinchona and its preparations. From this list the further grouping of medicinal agents may be fairly inferred. A careful reading of the various articles has convinced us that, as a rule, the author has made a fair and compact analysis of our knowledge of each remedial agent. But in order to appreciate these articles it is necessary that the student first master minute physiology, chemistry, anatomy and the pharmacy of drugs. This last should include both laboratory work and the careful study of the pharmaceutical part of the U. S. Dispensatory. Like H. C. Wood's work, this book is purely a work on therapeutics. Now, if some one would write a companion book on materia medica proper, including a course of practical work, colleges could afford to have two distinct courses, in succeeding years, on what is at present included in one course. A practical knowledge of drugs should be given to every medical student, as equally important to dissecting or work in the chemical and physiological laboratories. In the reorganization of the courses of medical instruction these things must be provided for. The time has come when six months should be given to *practical work*, not only in a dissecting-room, but in a chemical laboratory, in a physiological laboratory, in a pharmacy, and in a therapeutical laboratory. Now, in such a course as this the work before us would have a fitting place in connection with the therapeutical laboratory and the succeeding clinical study of disease. We doubt not that this book will hasten the day when such a course of graded practical laboratory instruction shall have been inaugurated in all of our medical colleges. Meantime we cordially commend the book to all students and medical practitioners who desire an acquaintance with the latest and most compact crystallization of therapeutical knowledge. The excellent paper, type and presswork render its perusal an actual pleasure.

MICRO-PHOTOGRAPHS IN HISTOLOGY—Normal and Pathological. By Carl Seiler, M. D. J. H. Coates & Co. publishers, Philadelphia. Published monthly; 60 cents per month or $6.00 per annum.

Number three of this periodical is at hand. In uniformity with other numbers it contains four plates, with explanatory text. Plate No. 1 illustrates one of the modes in which bone is developed. It is a section of the femur in a fœtus five months old, so made as to show both bone and cartilage, and the change in the cells of the latter as they approached the former. Plate two is a fine representation of enchondroma. Plate three, of hyalin cartilage; plate four, a transverse section of dry bone. Each plate needs careful study in addition to the explanations afforded by the excellent accompanying text. Those will be disappointed who look for the same clearness found in the usual diagram. All microscopic specimens need particular study to grasp their meaning. These photographs are to be classed with such specimens.

TRANSACTIONS OF THE MICHIGAN STATE MEDICAL SOCIETY. 1876. Paper. Pp. 131.

In our June issue we gave a full account of the meeting of which these transactions are a record. The report of the committee of nine has been widely criticised—strongly approved and as strongly condemned. It is significant that those who approve are strong supporters of the code of ethics of the American Medical Association, while those who disapprove desire the abolition of this code in one or more of its provisions, generally that part which forbids consultations with irregulars.

TRANSACTIONS OF THE AMERICAN OPHTHALMOLOGICAL SOCIETY. Eleventh Annual Meeting. 1876. Paper. Pp. 76.

Of the seventeen papers contained in this volume seven are reports of cases, most being both rare and interesting. Dr. H. W. Williams reports a case in which a tape-worm produced total deafness and blindness. The deafness began first and lasted six weeks. Removal of the worm was attended with entire recovery.

TRANSACTIONS OF THE STATE MEDICAL SOCIETY OF ARKANSAS. 1875–76. Paper. Pp. 100.

Besides the usual minutes of the meeting this volume contains twenty-two articles—all short—mainly devoted to reports of cases, many of them rare and interesting. Since the differences in the profession of Arkansas have been settled by the American Medical Association, we shall look for a still better report next year.

A SURGICAL STUDY OF GASTROTOMY AND GASTROSTOMY. By J. H. Pooly, Columbus, O. Pamphlet. Pp. 27. 1876.

Gastrotomy is the opening of the stomach for the removal from it of a foreign substance. Gastrostomy is the opening of the stomach for the purpose of introducing food in cases in which the œsophagus is closed in whole or in part. Of eleven cases of gastrotomy recorded only one died. The conclusion is that "when there is sufficient evidence of a body so large as to make it impossible that it can pass through the intestines without danger of being lodged in the stomach, or when there is much pain or distress the operation is called for and should be performed." Of eighteen cases of gastrostomy all died, the average duration of life after the operation being a little over three days, the longest period being thirteen days, the shortest fourteen hours. Ten died of exhaustion. In only two cases were there marked evidences of peritonitis, and both of these were cases where the sutures at the junction of the stomach with the integument had given way, and the one who lived thirteen days died of broncho-pneumonia."

THE STATE OF MICHIGAN, embracing sketches of its history, position, resources and industries. Compiled under the authority of the Governor in the interest of immigration by S. B. McCracken. Paper. 136 pages. A tolerably correct and valuable compilation.

ON SOME PRACTICAL POINTS in the treatment of those forms of Eye Disease of most frequent occurrence in general practice. By A. M. Roseburgh, M. D. Pamphlet. 13 pages. Subjects briefly treated are "Catarrhal conjunctivitis," "Granular lids," and "Phlyctenular ophthalmia."

FIFTH ABSTRACT OF THE ANNUAL REPORTS of the county superintendents of the poor of the State of Michigan, 1875. Paper; pages, 58.

A BRIEF REPORT of eleven cases of sympathetic ophthalmia and sympathetic irritation. By A. M. Roseburgh, M. D. (from *Canada Lancet*, June, 1873).

DIAGNOSIS OF THOSE DISEASES OF THE EYE which can be seen without the ophthalmoscope. The fifth issue of second volume of American clinical lectures. A lecture of interest to the general practitioner, and one profitably studied by every medical student.

CLINICAL STUDY OF HERPES ZOSTER. By L. Duncan Bulkley, M. D. Reprinted from *American Journal Medical Sciences*, July, 1876. Noticed elsewhere.

ANALYSIS OF SIX HUNDRED AND SEVENTEEN CASES OF SKIN DISEASES. By L. Duncan Bulkley, M. D. Reprinted from the *American Practitioner*, April and May, 1876. An interesting and profitable clinical contribution to the literature of cutaneous diseases.

BOOKS RECEIVED.

We have received the following works: Sixth Annual Report of the New York Ophthalmic and Aural Institute. Volume XI Ziemssen's Cyclopædia. New American Edition of Robert's Practice of Medicine. New Edition of Meadow's Midwifery. Seevill on Dental Anatomy and Surgery. Thirty-third Annual Report of the managers of the State Lunatic Asylum of the State of New York. Transactions of the Medical Society of the State of Maryland, 1876. Remarks on Intra-Uterine Polypi, by A. Reeves Jackson, M. D. Orthopedic Surgery, by Van S. Lindsly, M. D., Nashville Tenn., and Theory of Medical Sciences, by Dr. W. Dunham.

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Original Communications.

ACHIEVEMENTS IN MEDICINE—INCENTIVES TO ITS SCIENTIFIC STUDY.

By George E. Ranney, M. D., Lansing, Mich.

[Concluded from page 610.]

In view of the achievements of the profession of medicine, which have so greatly inured to the benefit of the human race, it is with pleasure we contemplate the object of our profession, which is, as we have seen, to prevent, mitigate and remove the pains and sufferings caused to our fellow men by violence and disease; to restore them to health and enjoyment so far as is permitted to human agency to accomplish—an *object*, when we consider how the want of health renders all we possess besides of an earthly nature almost utterly worthless, and makes life itself a burden; that from sickness, disease and death no member of the human family can, by any possibility, obtain exemption; which places its importance, its value, its benevolence, its all embracing charity, in a point of view so transcending as to awaken the highest admiration and elicit all the faculties which God has given us for its accomplishment.

This profession, to which we have dedicated ourselves, has for its *subject* the physical constitution of man, in whose mechanical structure his Creator has made an exhibition of wisdom not exceeded, perhaps, in any of the works of His almighty hand; a complete knowledge of which requires, if it does not exceed, the exertion of the highest faculties He has given us, is indispensably necessary to our professional success, rewarding the faithful and persevering student with exalted mental pleasure, and lifting his heart in adoring admiration to the Divine Architect who formed us from the dust and breathed into us the breath of life.

That such a piece of refined mechanism as the human body, of such numerous parts and members, holding to each such minute, definite, important and necessary relations, attached and connected by filaments of the most delicate structure and composition, and all material to the healthy and efficient operation of the machine itself, that it should be fearfully liable to disarrangement and decay might be most confidently assumed prior to any teaching of experience and observation. To the fact that it is thus liable—that it so frequently needs to be readjusted and repaired—our profession owes its existence, and to do this is the mighty work to which that profession calls us. In contemplation of this work, who will not exclaim, with the prince of Latin poets, when describing the reäscending from hell to earth, "*hic labor, hoc opus est*" (this is labor, this is work).

The external framework of the body of man, in which the delicately formed and very complicated machinery is placed which sustains and constitutes the working powers of human activity, presents to the *anatomist* a subject of study of the richest intellectual interest, the mastery of which is absolutely indispensable to the successful reparation of the many injuries to which that framework is exposed from the violence incident to the operation of peaceful industry, as well as in the conflict of arms, in the field of agriculture, in the workshop, and in the manufactory, as well as in the "eminent deadly breach." To an exact, thorough knowledge of anatomy the surgeon owes, of course, his ability and skill to repair successfully all these injuries, and without this knowledge his operations, "while death surrounds the knife on every side," are scarcely less painful and destructive than Minie ball, the bayonet, rifled cannon or the bomb shell.

But if so much intelligence and skill are necessary for the surgeon in repairing the external framework of the body, how much more are demanded for the relief and cure of the diseases, "whose name is legion," that afflict and torment the internal machinery of that body! For here we have to contend with a formidable host of unseen enemies, whose numbers, position, strength and reserved forces are sometimes masked from our *reconnoissance* so effectually as to defy observation and render it impossible to discover the best point of attack. Here, then, a field opens to our labors of almost boundless extent, and to explore it thoroughly requires the expenditure of the most exhaustive study and research—all the aids which the treasured experience of the master minds which in all past time have gone before us can furnish, joined to the application by ourselves of the most inquisitorial, scrutinizing observation, and sober, fearless, manly, independent judgment.

But when we have discovered his position and strength, a task almost as difficult, and one which requires the best knowledge and experience that unwearied study and judicious practice can bring to our assistance, remains to be accomplished: that is, the choice of the weapons by which the enemy can be most effectually routed and overcome. Without the ability to make this choice wisely all our previous attainments in medical science cease to be of value, and we are as powerless for the encounter as is the puniest infant to combat with a giant. Of course, then, a knowledge of the appropriate remedies is indispensable. And here opens another field of labor, the extent of which can be measured only by the all but innumerable ills which mortal man is heir to. But this field must be explored with diligence and care, or our professional labors will result only in defeat and sore mortification. And yet our most extended and indefatigable researches in this field, however honorable to our industry, must fall, alas! far short of complete success. For richly as the labors of the profession in this direction have been rewarded, ignorance only will assert that a certain and efficient remedy has been found for every distinct disease. And how constantly is the best medical skill baffled and thwarted by the ever-varying forms which diseases are constantly assuming, and by their vexatious complications with each other.

Yet a limited measure of success in this conflict cannot fail to cheer our hearts with the hope of an ultimate triumph, and stimulate us to renewed and unyielding exertions to overcome the enemies of our humanity.

In these several departments of our professional study and labor how grateful should we be for the generous aid and encouragement which medical science proffers us from her abundant stores, made up of the accumulated contributions and offerings with which her distinguished sons, in the revolution of centuries, have delighted to honor her temple, and thereby to signalize the devotion with which they knelt at her altars. How greatly should we rejoice for whatever opportunities she has afforded us to enrich ourselves with these treasures in order that we may be her almoners to distribute their benefits for the amelioration of the pains and sufferings of our fellow men under the visitation of sickness and disease. The fountains which she has opened to us, though forever overflowing, are never exhausted. The deeper we drink at them, with the greater sobriety shall we climb the mountain hights where stands her temple. These springs, while they refresh and exhilarate us, do not enervate, but only endue us with renewed vigor. They only gratify our thirst to increase it, till our minds have imbibed the *fullness* of knowledge. The oftener we repair to these fountains, and the longer we there quaff their pure waters, the greater will be the joy and energy with which we shall press forward to the goal of our calling, and the more certain shall we be of securing its high prize.

The field of medical inquiry is endless, but those branches usually called collateral, such as mineralogy, chemistry and botany, in particular, should demand our attention, For they proffer to our aid means and instrumentalities the most necessary and efficient for prosecuting our labors with success. The boundless domains of nature spread themselves out before us, and invite our wide-searching exploration. They welcome us to enter her dark and most secret chambers, the "*abdita ima penetralia*" of her temple, where her profoundest mysteries are waiting to unveil her charms to the inspection of her ardent worshiper. The earth, like a fond mother, opens her bosom to our embrace, and solicits us to draw from it the restoring aliment of life and health. She adorns her face and crowns her head with herb and plant and flower of every hue, fragrant with odors, and waiting the process of distillation that may furnish us with means of assuaging the pains and renovating the health of her children. Hence the student may say, not in the arrogance of conceited pride and pedantic ignorance, but in the modesty of true science,

"For me kind nature wakes her genial power,
Suckles each herb and spreads out every flower;
Annual for me the grape, the rose renew
The juice nectareous and the balmy dew;
For me the mine a thousand treasures brings;
For me health gushes from a thousand springs."

But to descend from the poet's enticing descriptions of the beauties of nature to our humble prose, we may remark, that to read her many volumes aright, and to possess ourselves of their profound teaching, we have a far more difficult task to accomplish than the practitioner whose encyclopedia of knowledge is contained in his list of "specifics" or book of recipes—a mere duodecimo dispensatory, which any disciple of St. Crispin, tired of cobbling and ambitious of the title of doctor, with the ability to read English "without spelling more than half the words," may commit to memory in less time than it would take to manufacture a pair of boots. For the secrets of nature utterly refuse to disclose themselves to the ignorance of the empiric and quack, and cannot be unlocked but by the keys of science. Hence it is that in our most strenuous efforts for the attainment of true professional *excellence* we must forever fail to reach it, unless these efforts are guided and regulated by the sound principles of philosophical investigation. The vain hope of arriving at scientific truth by *a priori* theories and speculations originated by the imagination, "that most forward delusive faculty, the mother of all error," must be utterly abandoned, unless we are content to wander eternally in the mazes of false science and forever conjecture, "which leads only to bewilder," and dazzles to blind us by its tinsel glare.

All true art is built upon true science, which sternly forbids our remotest approaches, unless they are made through the avenues which sound philosophy has opened for her children to walk in.

These avenues are "*a careful observation drawn from these by the most cautious induction.*"

"The province of human knowledge," says Abercrombie, "is merely to observe the facts and to trace what these relations and sequences are." Hence, if we ascertain all the laws and the results which attach and follow from a particular thing in itself, and in any variety and combination, and in every position and under every influence it can be placed, we know for practical results all that is necessary for us to know. If, however, we do not know the laws and qualities of the simples which make up a compound, we are always in the dark, and might add another which would destroy the compound.

The object of all science is to ascertain the established relations of things or the tendency of certain events; in other words, the aptitude of certain bodies to be followed by certain changes in other bodies in particular circumstances. The object of all *art* is to avail ourselves of the knowledge thus acquired by bringing bodies into such circumstances as are calculated to lead to these actions upon each other, of which we have ascertained them to be capable. *Art*, therefore, or the production of certain results by the action of bodies upon each other, *must be founded upon science*, or a knowledge of their fixed and uniform relations and tendencies. *This principle applies to all sciences and to the arts* or practical rules which are founded upon them, and the various sciences differ only in the practical substances or events which are their more immediate objects.

But after all, there will be mysteries unfathomable by man, for all science can do, at best, is to separate compound matters into the simple elements, and ascertain the qualities of the simple and the effect it produces in combination and relation to other things, either in a simple or compound state. But why such qualities should or do exist, or why such results should follow, must forever remain secret to man.

In the physical sciences we investigate the relations to one another of different bodies, and their actions upon each other either of mechanical or chemical nature. On the relations thus ascertained are founded the mechanical and chemical arts, in which we produce certain results by bringing bodies into such circumstances as are calculated to give rise to their peculiar actions.

In *medical science* the objects of our researches are chiefly the relations between external things and the living powers of animal bodies, and the relation of these powers to each other; more particularly in regard to the tendencies of external things to produce certain changes upon living bodies, either as causes of disease or as remedies.

The practical *art* founded upon this science leads to the consideration of *the means* by which we may avail ourselves of this knowledge, by producing in the one case actions upon the body which we wish to produce, and in the other by counteracting or avoiding actions we wish to prevent.

These are the teachings of philosophy, and by them we are brought inevitably to the very important conclusion that "he who follows certain arts or practical rules, without a knowledge of the *science* on which they are founded, is the mere *artisan* or empiric; he cannot advance beyond the precise rules which are given him, or provide for new occurrences and unforeseen difficulties."

And how constantly has the physician to encounter these "new circumstances and unforeseen difficulties!" But if he is indeed a scientific physician, when his practical rules fail him he can fall back upon the science itself upon which his art is founded, and from that deduce new rules better suited to meet the peculiar necessities of the case before him. As these new occurrences and unforeseen difficulties present themselves, he can vary his remedies as a scientific judgment may direct. This is his only resort, and in case he fails of success he may rightfully enjoy the consolation that his endeavors have been directed by intelligence, instead of the blind conjectures of the quack, who owes his little success to luck and chance. He may weep that he could not save his patient, but he feels no self-condemnation when he has employed the best means for his relief that medical science and art could suggest. He may then rest upon his established reputation and wait with confidence for the approbation which in the end will seldom fail to be awarded by the intelligent and just to wise and judicious endeavors.

Happily, in the pursuit of our very arduous and responsible profession we are not compelled to rely altogether upon our individual and solitary efforts. The generous sympathies and friendly counsels of professional brethren, kindly extended, inspire us with strength and confidence in the discharge of our duties; we cease to feel like single combatants, but rather as members of a well compacted phalanx, whose unity gives it a power to resist every onset of the enemy, setting defeat at defiance, and assures us of victory. The young physician, like the young soldier, standing shoulder to shoulder with the veterans who have seen service in the hardest fought fields, joyfully participates in their self-possession, coolness and courage, discards his fears, and advances with firmer step to the encounter of arms. Such a phalanx do our societies present, and we welcome their assembling as the sons of Mars do the trumpet's sound for order of battle. For they assure us of union of purpose and of effort. In these reünions—this marshaling of forces—we see our strength. It reminds us of victories achieved and points to victories yet to be won. It tells us of our progress and triumphs gained, and of greater progress and triumphs yet to be reached, and animates, therefore, with a courage and invincibility never to submit or yield. Nor can we forget for how much aid and pleasure we are indebted to our medical periodicals, which every returning month spread the tables of our studies with a rich repast of medical literature and science provided by their able editors and the learned brethren who contribute their generous assistance. Does not the service thus rendered demand for them who render it not only our gratitude, but our liberal patronage and support?

And lastly, but not least, of other agencies which give support to our cause, how much do we owe to our State University for the instruction from its various departments it has imparted to our profession, through the faithful and assiduous labors of her learned and able faculties! In the success of these labors rest the highest hopes of Michigan for intellectual, moral and social advancement. And with grateful confidence and assurance may we predict that these hopes will be proudly realized; and when this prediction is fulfilled may we not indulge the grateful anticipation that some rays of light may then penetrate even the dark halls of our Legislature, and that it will be inspired with nobler purposes than that of degrading a profession in whose advancement the lives and happiness of the people of Michigan are so deeply interested to a level with quackery and imposture?

But be that as it may, let us not falter in our duty to our fellow men, to ourselves, and to our honorable vocation. Animated with an ever-enduring zeal and energy in its pursuit, let us labor and strive to *merit* the rewards due to *well-doing.*

TWO CASES OF EXTIRPATION OF THE PAROTID.

By Theodore A. McGraw, M. D., 107 Fort Street West, Detroit.

Cases of extirpation of the parotid are not so common but that their occurrence is worthy of record. I offer, therefore, the following report of two cases from my own practice.

The first occurred in the person of Mrs. Samuel Acker, aged fifty-two years. The tumor, which made the operation necessary, had a history of seven years, beginning as a small lump in front of the left ear, remaining nearly stationary for a long time and finally exciting alarm by its sudden and rapid increase in size. At the time when I was consulted about the case the growth was as large as a hen's egg, and sprung, evidently, from that part of the parotid which lay imbedded behind the ramus of the jaw. It was not painful, nor tender, nor adherent to the skin, nor did it interfere with the motion of the jaw, but its rapid growth seemed to me to render its removal imperative. I operated on April 26th, 1875, beginning my dissections below and behind the ear. The gland was dissected out, the external carotid found and cut between two ligatures, the internal maxillary and temporal arteries secured at their distal portions, and the tumor and nearly the entire parotid gland removed. The facial nerve was of necessity destroyed.

The wound did well; the carotid ligature, although of carbolated silk, came away at the end of two weeks, and on May 21st the patient left the hospital very nearly recovered. There followed the operation complete paralysis of the facial nerve, with drooping of the lower eyelid and drawing of the opposite side of the face. The tumor, on microscopic examination, showed numerous cells of epithelial type imbedded in intercellular tissue. There is as yet no sign of recurrence.

Nearly a year after the operation just described I was consulted by Mr. McConnell, a farmer of Weston, Mich. He had had for two years a tumor in front of the left ear. Its removal had been once attempted by a distinguished surgeon of southern Michigan, in the belief that it involved only the capsule of the gland, but on the discovery of its more intimate and deeper connection with the parotid the operation was abandoned, the operator being reluctant to destroy the facial nerve. A physician of the neighborhood then attempted its extirpation by means of caustics. This attempt also failed, and was succeeded by a rapid fungous development, so that the cheek soon became largely implicated in the disease. This, by the way, is my usual experience with caustics in malignant tumors. If the caustic proves insufficient to thoroughly destroy the mass, if one cancerous germ is left behind, its use is followed by a rapid recurrence and extension of the disease.

I operated on April 7th, 1876, being obliged to extend my incisions over the malar bone and far into the cheek. My incisions were made as before, but for certain reasons, shortly to be stated, the dissections were more tedious and difficult, and the carotid larger and more deeply seated. When the gland and its attached tumor were finally removed, there was left a raw surface about four inches in diameter and extending deep into the neck. The carotid ligature came away after ten days, and the patient left the hospital on May 1st with but a small granulating surface unhealed. The tumor on examination proved to be of decidedly scirrhous character.

In discussing the relations of parotid tumors, medical men almost invariably become involved in an argument as to the possibility of the complete removal of the gland. The individual views on the subject are almost always determined by the character of previous anatomical studies. The theorist who remembers the difficulties which have attended the dissection of the healthy gland scouts the possibility of its complete extirpation, while the practical surgeon who has actually destroyed by operative means all traces of the organ naturally regards *a priori* arguments to the contrary as trivial and unworthy of consideration. The discussion is in a great measure one of words, and hinges upon the meaning of the term "complete extirpation." If it is meant thereby that every vestige of the gland must be removed at the time of the operation, by the knife or finger, then it may be doubtful whether it has ever been completely extirpated; for the processes which pass behind the condyle of the jaw are rarely implicated in diseased conditions and seldom sought for by the surgeon. But if it is meant thereby that the gland shall practically cease to exist in consequence of the operation, then there can be no doubt of the fact that it has again and again been wholly removed; for not only have surgeons so thoroughly cut it away that its place was left apparently vacant of tissue, but the total cessation of the salivary secretion has proved the absence of any secreting structures. The experience of the dissecting room is not always a trustworthy guide for surgical procedures, and in the case in question there can be no doubt that conditions of disease usually facilitate the extirpation of the parotid. The difficulties of the operation are apt, therefore, to be exaggerated by the theorist. There are many ways in which a tumor may cause changes in the normal condition of the parotid gland. First of all, its pressure upon the glandular substance or upon its nutrient arteries may cause atrophy. This is commonly the case with tumors which arise from that part of the gland which lies directly behind the ramus of the lower jaw. In the case of Mrs. Acker the gland was very small, its processes being short and retracted, and the carotid artery was but half its usual size. With Mr. McConnell, on the contrary, whose tumor lay more on the cheek, the gland and the artery were both large and more deeply seated.

The tumor, if projecting behind and beneath the jaw, may act as a wedge with its base upwards and outwards. The motion of the jaw will then inevitably tend, by impinging upon this wedge, to lift the parotid away from its deeper attachments. The connective tissue which binds it to its place will yield as this process is continued year after year, until finally the gland becomes comparatively superficial.

could be observed in them by the microscope. All the stones were also surrounded by a crust of uric acid.

The question arises now, how came these stones in the bladder? They were too large to be brought artificially into the vesica, and, as the urine of the patient was normal and contained no cholesterine, the stones could be formed neither in the kidneys nor in the bladder. This makes it apparent that the stones could have come into the bladder only by means of a pathological state. The nature of this, of course, could not be decided, as the patient was still alive, and an exploration made for this purpose had no result. It is known that gall stones sometimes perforate the abdominal wall, or that they may form a fistula towards the colon or the stomach. Two cases are recorded which took the latter course, the diagnosis of only one of which was confirmed by a post-mortem.

From what has been said it will be evident that in future gall stones must be numbered among the concretions to be found in the bladder.

XIV. On Mycosis of the Lungs in Men, (*Dr. P. Fuerbringer, of Heidelberg, Vol. 66, March, 1876.*)

Parasites of the vegetable kingdom are seldom found in the lungs of men, provided that we exclude bacteria. The fungi found in most cases of mycosis belong to the genera leptothrix, oïdium, mucor and aspergillus.

Three new cases of mycosis were examined by the author. He comes to the conclusion that mycosis is only a secondary affection; Virchow had, however, previously made this certain. The principal facts obtained by the doctor are as follows:

Mycosis is found only within the limits of parenchyma which is in a morbid state. The development of fungi is especially favored by necrotic lung tissue, by lung tissue infiltrated with hemorrhage, and by such chronic diseases as weaken the constitution. On the other hand, putrid processes in the lung tissue *interfere* with their development. But it seems that in this state of the lung the place of the fungi is taken by large numbers of bacteriæ. Whether the putrid process is caused by them, or whether they only accompany it, could not be decided till now.

The diagnosis of the mycosis can be made only in case the *spores of fungi* are found in recently expectorated sputa.

XV. On the Local Action of Atropia. (*A. Zeller, of Heidelberg, Vol. 66, March, 1876.*)

Several authors had observed already that a solution of atropia caused a contraction of vessels when applied to a frog's web-membrane. Hayden thought that this contraction was due to reflex action. Then other observers noticed that an injection of a certain quantity of atropia is followed by a dilatation of the smaller vessels.

The author intended to search for the conditions under which the changes in the calibre of the vessels take place. For this purpose he irrigated the tongue of the rana temporaria with solutions of the sulphate of atropia of different strength. The experimenter had found beforehand that a *watery* solution of the sulphate of atropia dissolves the coloring matter of the red blood corpuscles, *swells* the white blood corpuscles and makes them *transparent*, so that not only their nuclei might be seen, but numerous minute granules in them, being in a state of motion, whereas no signs of amœboid movement were observed.

To avoid the action of the watery solution of the atropia upon the blood corpuscles, which resembles very much the action of distilled water, the author dissolved the sulphate in an indifferent neutral solution of salts (chloride of sodium). This solution inhibits only the white blood cells from the amœboid motion.

Only the arteries dilate more or less when irrigated with a solution of one-half to one per cent sulphate of atropia in water or in a three-fourths per cent solution of chloride of soda. At the same time, the blood flows more rapidly, which phenomenon is especially to be seen in the *capillaries* and *veins*. If wounds are irrigated with the latter solution, the emigration of white blood corpuscles is soon interrupted, the blood cells become globular and get granulated. Only when the irrigation has ceased for an hour or longer the emigration commences anew.

XVI. On the Quantity of Blood in Human Extremities. (*Dr. Paul Bruns, of Tuebingen, Vol. 66, March, 1876.*)

If we consider a saving of blood as essential for Esmarch's bloodless operation, it will be of interest to learn how large a quantity of blood circulates in a certain part of an extremity. But this knowledge will also be of importance for other reasons. As by the bandaging a dangerous arterial pressure might be caused, it is necessary to know the amount of blood which can be pressed out by it. The same knowledge will be of value in such cases of anæmia as where bandaging of the extremities is proposed to avoid threatened anæmia of the brain or paralysis of the heart. We learn, also, how much blood we may bring again into general circulation if we cut off the blood in the extremities in case of certain operations which might be accompanied by dangerous hemorrhage.

The author found that bandaging of the limbs with elastic bandages does not cause complete bloodlessness. The quantity of blood pressed out of the limbs by very tight bandaging amounted in four cases to about seventy per cent of the entire mass, while about thirty per cent remained in the limb. As these results were obtained from pathological cases, they are not decisive in every respect. But it seems certain that the extremities contain much less blood than has been hitherto supposed. In the doctor's cases the average quantity of blood amounted to three and eight-tenths per cent of the whole limb. This agrees with the per centage which Ranke found for the extremities of animals. It is only one-half of the quantity we should expect in the limbs if the blood was distributed to them in proportion to their weight as compared with that of the whole body.

Correspondence.

LONDON LETTER.

London, August 4, 1876.

To the Editor of the Detroit Review:

Since my arrival in London, I have been daily astonished by meeting some American medical men, so that at the present moment my acquaintances have swelled to such a number that I am still more astounded that we do not hear, in respect to medical education, a little more of this great city and a little less of the Continent. From the manner in which London is usually ignored in the foreign letters to our journals, one might well conclude that a visit here would be comparatively useless, and yet I feel no hesitancy in asserting, that after one has learned to a certain degree to manipulate the instruments and the modes of examination, he cannot find a better place to put his knowledge into practical use, and to perfect it by the examination of thousands of patients. This may be said with particular justice to any one devoting his attention to a special study, for the idea, so thoroughly carried out here, of providing different hospitals for different classes of diseases, calls the sick from all parts of the surrounding country, to visit the institution which is provided for their particular malady.

Laying aside all consideration of the general hospitals, with their immense clinics, there are the Brompton hospital for consumption and diseases of the chest, the Great Northern with its city out-patient department, and the hospital for diseases of the heart, where one can find an immense field to practice his auscultation and percussion, as hundreds of patients, offering all the different stages and forms of those important diseases, are daily present to be examined and treated.

In gynæcology, the special hospital for women, and the Samaritan Free Institution, offer every facility for study, as their wards and out-patient departments are much frequented by the sick, while the learned instruction and great affability of such men as Hayward Smith, Spencer Wells, and a host of others, make the service a very pleasant and valuable one. The opportunities of seeing both the greater and simpler operations are numerous, as twice weekly several hours are devoted to that part of the specialty, and thus one can see the practical use of the latest instruments in the practice of those who are most perfect in the use of them.

While on the topic of operations, I cannot refrain from speaking of the great contrast one perceives between the surgeons across the channel and the English and American ones; a contrast, however, which is easily explained, when one remembers the temperaments and dispositions of the nations. Until one thoroughly appreciates the French surgeon and the students before whom he has to operate, he might easily be inclined to think that he was present at a first operation, for to his eyes the precipitation of the assistants and the constant nervous speech and commands of their master, appear like signs of doubt or of ignorance. But when it has been explained to him, that if the surgeon does not continually speak, his audience say of him that he is "embêtant," and that if he keeps perfectly quiet they consider him nervous and as having "perdu sa tête," he is capable of looking on with a less prejudiced eye, and of perceiving that the operation ends as quickly and with as good results as if there had not been quite as much clamor about it.

The scene is completely different in the English amphitheatre, for here the patient is quietly brought in, a few whispered words pass between the attendants, cloroform is given, and the operation performed with a perfect calm, and it is only after its execution, perhaps, that the surgeon states his reasons for his mode of operating in the case, describes the movements, and finally calls for another patient. Certainly, to us, the latter style appears the more business-like, but I feel confident that the same course of proceeding by a French surgeon would elicit anything but applause from his students.

Before leaving the present question I must inform you that I had the pleasure of hearing, while in Paris, that the new operation for strabismus of our professor of ophthalmology, Dr. Noyes, at his first essay of which I had the honor of assisting, had been performed five times by Dr. Gazelowski, one of the oculistic stars of Paris, four of which were rewarded with perfect success, whilst the fifth required a slight secondary operation.

The London ophthalmic hospital, presided over by Messrs. Bowman and Chritchett, and of which I believe one of your correspondents has already spoken, is an immense establishment, crowded with work, and offering daily some five hundred patients for examination.

I have lately heard it reported that Mr. Liebreich, who has had control of the ophthalmic department of St. Thomas hospital for several years, being dissatisfied with his English experience, is about to leave London to return to Paris. Apparently, it will not be a very sad parting to the English medical world, for he appears not to have succeeded in making more friends here than he did in France or Germany.

It is wonderful how quickly London dust and smoke cause buildings to appear aged and dirty. Since I passed through the city on the way to the continent a wonderful change has already occurred in the appearance of St. Thomas hospital, for all its brightness and freshness seem to have disappeared, notwithstanding that a large body of workmen is constantly employed in repairing it. The building seems almost too immense to be kept in a good condition, for now that it has been in use for a comparatively short time, the roofs here and there show signs of leakage, the plaster falls, the paint peels off, and in fact a general appearance reigns as if the place had been untenanted for some years.

What I have said in respect to the few hospitals of which I have already spoken might be repeated for those of the throat, ear, skin, syphilis, cancer, etc., but since I have already given the general idea, which I wished to convey, it is useless to occupy your space with like details of the latter institutions.

To one accustomed to hear of the number of years the greater portion of our medical men pass in their practice without taking a holiday, it seems really strange to hear all the gentlemen here speak, as if it were quite the usual thing, of going away for their summer vacation.

The week ending July 21 was the hottest one which London has had for twenty-three years, though it could not compare with frequent Detroit July and August temperature, and as a consequence thousands left the city. The medical fraternity, however, do not leave until about the 15th inst., and at the present moment every one on the hospital staffs seems to be on the search for a substitute. From that date onwards to October a stay in London will hardly be worth the trouble, as all work will probably be despatched as quickly as possible.

I remain very truly yours,
E. CHAPOTON, M. D.

JACKSON LETTER.

To the Editor of the Detroit Review of Medicine.

In view of the fact that some of the profession are laboring under a misapprehension respecting the exact status of the medical faculty of the Michigan University, and that others but partially informed have been misled by the sophisms of individuals favoring the "homœopathic plan," which has been adopted at Ann Arbor, it may not be out of place to present a brief statement respecting the present condition of affairs in the medical department, as brought about by the various transactions in respect to it, which have occurred from and including the passage of the act of organization (if it can be so called) of the homœopathic medical college. In doing so it is simply necessary to compile what has already been written, only adding such thoughts as may present themselves, from time to time, and with but two objects in view, viz., truth and brevity, we begin with the action of the board of regents, at their meeting on the 17th of February, 1875, *three* *days prior* to the introduction of any bill on the homœopathic question before either branch of the legislature. At this meeting regent Rynd, chairman of the University committee, made a report, which was adopted, declaring "that we will, if so desired by the legislature, manage the affairs of *such* college of homœopathy as may be established, to the best of our ability, and use such funds as may be entrusted to our administration for the interest of the cause for which such funds may be appropriated."

If that isn't direct encouragement for the establishment of a homœopathic college, what is it? Here was the legislature, supposed to be pregnant with the homœopathic question, and with a prospect that, as on former occasions the fœtus would be stillborn, when Dr. Rynd appears on the stage, and, through the board of regents, proposes in common parlance to "turn and deliver."

The deed was done, and after considerable travail the legislature passed the following bill:

> SECTION 1. The people of the State of Michigan enact: The board of regents of the University of Michigan are hereby authorized to establish a homœopathic college as a branch or department of said University, which shall be located at the city of Ann Arbor.
>
> SEC. 2. The treasurer of the State of Michigan shall, on the first day of January, 1876, pay out of the general fund, to the order of the treasurer of the board of regents, the sum of $6,000, and the same amount on the first day of January of each year thereafter, which money shall be used exclusively for the benefit of said department.
>
> Approved April 27, 1875.

It will be seen by section one that the Regents are not commanded or even directed to "establish a homœopathic college," but they are simply "authorized" to do so. There was nothing compulsory about it, nor was it obligatory on them unless by previous arrangement they were party to the act. This supposition is made easy by the known fact that certain of the regents and faculty were present during the pending of the bill, and gave at least tacit consent to its enactment.

Again, the act makes no specification as to the branches which shall be taught or the number of teachers to be employed. It simply authorizes the establishment of a "homœopathic college." Now, it is presumed that even the infinitesimal adherents themselves would hardly favor the idea of carrying their dogma into the formation of a college, for if two professors can constitute a college, why cannot one? The regents must have adopted the idea that one swallow makes a summer.

Section two authorizes the payment of $6,000 yearly for the support of this "college," and has this peculiarity that it must be "used exclusively for the benefit of this department." This is therefore a separate fund, and endows munificently that little double-barreled "college," besides guaranteeing a healthy condition of future finance.

This is the "homœopathic college" which the faculty tell us has no more connection with the department of medicine and surgery than the department of law has, and which, by an astounding feat of legerdemain, is placed in such a position that the faculty are or are not responsible for the graduation of homœopathic students—just which way you had rather have it.

We next come to the meeting of the faculty, on the 30th of April, 1875, when the "plan" of regent Rynd was proposed, and where the faculty "interposed no serious objections." That is, instead of protesting against this outrage they shook hands with a committee of the board of regents, and the board ratified their action at their next meeting, which occurred the 11th of May following. This "plan" is in the form of nine "resolves," as follows:

Resolve 1. That a homœopathic medical college be established in the city of Ann Arbor.

That sets at rest the question as to who *established* this homœopathic college, notwithstanding regent Rynd's earnest desire to foist it onto the shoulders of the legislature.

Resolve 2. That two professors be appointed, who shall be designated respectively professor of materia medica and therapeutics, and professor of the theory and practice of medicine in the homœopathic medical college of the University of Michigan.

There is a little jar in the latter part of this "resolve," where it says that these professors shall be "*in* the homœopathic medical college." It should have said that these professors shall *constitute* "the homœopathic medical college." Otherwise it makes the regular faculty constitute the balance of this homœopathic college. This must have been an oversight on the part of the faculty when they "interposed no serious objections," for they positively declare that *they* do not form any part of said "college."

Resolve 3. That all students entering such college shall record their names with the secretary of the University under the designation of students of the homœopathic medical college of the University, and shall be so registered in the calendar; shall pay the same fees, and be subjected to the same regulations which are now in force or which may be hereafter established for the government of the medical department of the University of Michigan.

You will observe that this "resolve" does not say anything about matriculation, or about any intention to study homœopathy, but "that all students *entering* such college shall record their names" as "students of the homœopathic medical college." What an absurdity! Compelling a student to decide before he has heard the evidence, so to speak, and to register his decision "in the calendar!"

Resolve 4. Students entering the homœopathic college shall receive instruction in the now existing medical department in all its branches not provided for by the chairs established above (including practical anatomy.) They shall be entitled to all the privileges accorded to students in the medical department, and shall conform to all the requirements of said medical department.

This "resolve" contradicts itself in that, with the first clause it bars them out from the regular lectures on materia medica and theory and practice, while with the last it gives them full swing to the whole business. This is what might be termed "class legislation."

Resolve 5. Lectures shall as far as possible be given to such students by the homœopathic medical professors at and during the same hours which may be occupied by professors holding corresponding chairs in the medical department of the University, and at any other time which may be determined by such homœopathic professors, provided always, that such students are not engaged in the legitimate performance of duty in the now existing medical department.

This is a somewhat notorious "resolve" in that it attempts to prevent what the faculty are trying to accomplish—the conversion of the homœopaths—by using the same hour for corresponding lectures. It further makes a distinction between homœopathy and medicine. "Lectures by homœopathic medical professors shall be during the same hours which may be occupied by professors holding chairs in the *medical department*." A wise distinction, by the way.

Resolve 6. The same conditions shall be applied to their matriculation, time of study and graduation as now exists or may hereafter be fixed in the medical department of the University; and it shall be the duty of the president to satisfy himself that such conditions are duly enforced in the homœopathic medical college and in the medical department.

In this "resolve" we get the first intimation that they must matriculate, and the "students" are informed that they must abide by the same regulations as if they were studying medicine. And the president is to see to it himself.

Resolve 8. All students graduating from the homœopathic medical college shall be furnished with diplomas so designated.

This "resolve" prevents putting the wrong label upon the different vials that come from the same shop.

Resolve 9. From and after the present University commencement, degrees shall be conferred as provided for by the regents of the University, but all diplomas in every department of the University shall be signed only by the president and the secretary, and shall have the corporate seal of the University attached.

It is only necessary to state that the diplomas of the class of '76 were signed by the faculty to show that this "resolve" is a dead letter.

By a strange coincidence it happened that at this meeting there were several prominent homœopaths present from various portions of the State, and after the reading of the "plan" they were "respectfully requested to address the Board," and they did. They gave it their blessing, and it was unanimously adopted by the Board. There were no regular physicians there—at least they weren't invited to say anything. Why? Because the "plan" had been duly inspected by the faculty some days previous.

The next thing in rotation was the meeting of the State Society, in June, 1875. Here the faculty, who were by this time fully committed to the "plan," fearing lest the society might inquire into their proceedings, and evincing none of that "desire to be guided by the society," which they afterwards claimed, succeeded by adroit caucusing in preventing any action; practically saying to the society "you keep quiet, we can run this institution without your assistance." And they did run it alone, as lively as a fire in a carpenter's shop, until the alumni meeting of March, 1876.

At this meeting were several of the oldest alumni, who, with no unfriendly feeling towards the faculty, desired a fair and untrammeled discussion of the situation, but were met by opposition and abuse until finally they abandoned the project and allowed the faculty to conduct the meeting according to *their* "plan." It was here that the faculty sowed to the wind, and they reaped the whirlwind at the next meeting of the State society, which occurred in May following. And after all it would not have proved much of a thunder-gust, if the windy portion of the faculty had not supplied the thunder. Failing either to silence debate or obtain the sanction of the society, members of the faculty and their friends hurled vituperation and abuse at the society, which found itself treated to such choice expletives as "hired assassins," and the like.

Now, the State Society claim no right to dictate to the Board or the faculty as such, but *have* a right to express an opinion as to the character of the action of the former, and to control the action of the individual members of the faculty, as members of the State Society. The resolutions of the State Society were couched in the mildest possible form, and simply said, "that we are not *content* with the existing situation of the medical department of the University." But even this was too much for these self constituted autocrats of the profession.

The matter was next carried before the American Medical Association, which made short work of it by unanimously adopting the following resolution:

> *Resolved,* That members of the medical profession who in any way aid or abet the graduation of medical students in irregular or exclusive systems of medicine, are declared thereby to violate the spirit of the ethics of the American Medical Association.

At a meeting of the faculty of Rush Medical College, July 5th, 1876, it was resolved not to accept hereafter the time and attendance of students upon lectures of the medical department of the University of Michigan, "so long as the teaching of homeopathy in whole or in part shall be included in the course of study at that institution." All the leading eastern colleges, up to a recent date, have failed to take any faculty action on this question, except the College of Physicians and Surgeons, and they give no guarantee that the "tickets" of future classes will be accepted.

This condition is the natural outgrowth of the violence done to professional sentiment universally, and for which the Board for inaugurating, and the faculty for endorsing without the slightest protest, are to be held responsible.

E. B. WARD.

JACKSON, September 16, 1876.

ANN ARBOR LETTER.

ANN ARBOR, Sept. 20, 1876.

Editors of the Detroit Review:

GENTLEMEN—My attention has recently been called to a letter from Dr. Geo. E. Frothingham, published in the twenty-fifth number of the *Boston Journal* in June of the current year. Purporting to be a reply to an article published in a previous number of the *Journal*; I do not deem it appropriate or necessary to point out the sophistry and errors of statement in the general subject therein discussed, but limit myself to a few comments upon the assumed "damaging facts" of a personal character that had been several times repeated in the *Peninsular Journal*, and refuted in former numbers of the DETROIT REVIEW.

Employing the small arts of the politician, the writer of the letter seeks to diminish the effect of the reference of the editor in a previous article to the unanimity of my election to the presidency of the State Society as an emphatic rebuke to the faculty, by representing it as the action of "a clique." Undoubtedly the first ballot, comprising more than two-thirds of the votes cast, may be fairly thought to represent the majority of those who concurred in sentiment with me in regard to the condition of the medical department, and who were not disposed to be hushed up by the specious promises and artful pretexts employed successfully by the faculty and coadjutors at the annual meeting of the Society in 1875.

At the meeting of the State Society in June, 1868 (not in 1865 as erroneously stated by Dr. F.), a resolution was passed expressive of the views of the Society in relation to the then existing relation of the faculty to the homœopathic imbroglio, but too late to influence the action of the faculty, which had already taken decisive but not definitive action. At the meeting in 1875, a resolution was introduced, under nearly identical circumstances, the object of which was expressed in these words: "In view of the recent action of the Regents in reference to the introduction of homœopathic professors and students, we believe a crisis has now arisen in its history which justifies and perhaps demands from the regular profession of the State a *frank expression of opinion.*"

To this resolution, after much caucusing, as reported by an eyewitness, Dr. Maclean, the gag-law was applied, and permitting *no discussion* it was laid upon the table by a very feeble vote; the Regents and faculty thus virtually saying to the Society, "hush up, we do not need your advice on this question, but are quite competent to manage it without your interference." But from the vote of the Society in 1876 on the resolutions of the committee of nine, it became obvious even to the faculty and Regents that they were no longer in a plastic mood and subservient to any manipulation in the interest of the faculty. It was to this committee of nine, composed chiefly of gray-haired gentlemen selected from every part of the State, and the peers of any equal number of gentlemen elsewhere to be found, that Dr. Frothingham, by so wide a departure from gentlemanly courtesy that I hesitate to characterize it by an appropriate epithet, applied the comparison of "*hired assassins*," and for no other reason than that the report of the committee made after deliberately hearing the testimony of the faculty, and examining the written evidence on both sides, was adverse to the partisan views of Dr. Frothingham.

Can it be that his sympathies for his homœopathic confreres, thinly disguised under humanitarian ideas, has its origin in the fact that his birth as a professor *with full salary* bears even date with that of his irregular coadjutors?

Were his violent denunciations of the "plan of the Regents" immediately after having given his assent thereto before the medical committee a sham and a pretext to cover his real views; or are his violent denunciations of his opponents who seek to guard the honor of the profession of the same character now? At all events it would seem that those who charge others with inconsistency should look well to the protection of their own glassy defenses.

Comprising a fair share of this large majority were the votes of the alumni of the medical department, and there is abundant and reliable evidence that four-fifths of the earlier alumni hold concurrent opinions, and of course belong to what Dr. Frothingham (an alumnus only of later years) so courteously (!) designates as "that clique." As an illustration of the sentiment which is believed to obtain among the alumni generally, we cite among others the published opinion of the distinguished professor of surgery in the Maine Medical School, W. Warren Greene, M. D., who so promptly resigned the professorship of surgery under like circumstances in 1868. He writes: "I confess I have not yet seen a single point taken by the defense that to me has real weight. The most plausible is that if the ground was abandoned it would be occupied by the enemy, or, at least, the present faculty would be replaced by inferior or unworthy men. In the name of common sense does not 'the enemy' occupy now? And *why* should the places be filled by *inferior* men? Is it assumed that the country lacks competent teachers for *honorable* positions? Or, is it assumed that *such* men would decline the disgraceful alliance? If the latter, what an admission for the present incumbents of the several chairs. The simple fact is, it is all wrong, and no sophistry can right it. * * * I have always been proud of the diploma I hold from the medical department of the University of Michigan, but if this foul blot is to be allowed to remain upon her escutcheon I feel, as I know so many others of my brother alumni do, that I can never look at it again without feelings of profound shame and regret that I cannot exchange it for one from a respectable institution." Holding such pronounced sentiments, he too, although not a member of the State Society, must belong to "that clique," and is supporting "the charge of the Detroit faculty on the University!"

Again, the author of the letter to the *Boston Journal* writes: "The scheme of separate schools was an after-thought of his (Dr. Sager's), he at first not objecting to the present arrangement, and only after a very unpleasant interview with the president of the University did he resign, etc."

In reply to this statement I beg leave to say, that professing "to be familiar with my conduct in this matter," its author cannot escape the responsibility of the direct misstatement and innuendo contained in this paragraph. First, in saying that the scheme of separate schools was an after-thought of mine, he cannot be allowed to avail himself of the ambiguity of the expression, for I distinctly state and have on hand the document to prove that on the 6th of May, 1875, about a week prior to the enactment of the homœopathic "plan of organization" by the Board of Regents, a copy of an article containing my views of the situation was sent to one of the Detroit dailies for publication in the hope that the attention of the Regents would be arrested by it, and be induced to adopt the comparatively unobjectionable plan of an *entirely independent school* of homœopathy as therein indicated. I hazard nothing in saying that by the adoption of my suggestions the imminently perilous and dishonorable position into which the action of the Regents and faculty have thrown a former prosperous and reputable school would have been avoided. That your readers may judge of the justness of our views we submit a small but important portion for your pages, viz:

"In organizing such a college (homœopathic) two courses are open to the Board of Regents: either to establish a complete school of homœopathy with the usual number of six chairs, as in the colleges of Detroit and Chicago; or by naming only two professors, make it practically connected with and dependent upon the present school of medicine in the University." After pointing out the consequences of either course we continue: "To avoid these embarrassments and professional immoralities let them have a college as an *independent school* in the only sense in which that term can with truth and propriety be used. Let humiliating parasitism on the one hand, and impure hybridism on the other, be avoided, and the regular profession will withdraw all objections."

This, we repeat, was offered to one of the Detroit dailies about a week *prior* to the enactment of the "plan of organization" of the so-called homœopathic college, which occurred May 12th, 1875. That this palpable misstatement of Dr. Frothingham was *possibly* due to his *not* "being familiar with my conduct" (although these facts were published before in the DETROIT REVIEW) I can charitably admit, as I can recall but one interview with him during the transpiring of these events. Unfortunately the liberality of the secular press was not equal to the occasion, and the essay was declined. It was then read and discussed in the presence of Profs. Cheever and Maclean, and sent to the *Peninsular Journal* on May 16th and published by it on the 9th of June. It was thus brought to the notice of the leader of the homœopathic movement in the Board of Regents, Dr. Rynd, about three weeks prior to the first appointments of professors, by which pecuniary interests became involved.

Again, the insinuation that my resignation was due to a *very unpleasant* interview with president Angell is equally void of any foundation in truth. I repeat what has been already published without authoritative contradiction, as is well known to Dr. Frothingham, that the interview with the president was not embarrassed by any discourteous or unkindly expressions, and wholly void of offense by either party. As Dr. Frothingham was not invited to be present at this interview his "familiarity with my conduct" must be due as elsewhere, to hearsay testimony.

Furthermore, the author of the letter to the *Boston Journal* gravely charges me with neglect of duty in not giving prompt advice to the faculty touching their duty in the premises. What a preposterous proposition. For a quarter of a century the faculty never felt that their consciences were held in leading strings by the dean; it was reserved for the youngest member of the faculty to make the important discovery of this authorative relation of the executive officer of the faculty to its other members. Even admitting for the moment the preposterous and puerile sugestion, of what avail could it have been when the faculty *had already accepted the plan when proposed to them by the medical committee of the Board*, in anticipation of the subsequent action of the Regents?

With respect to our motives, which he also assails, I am quite willing to leave that without other defense against second-hand and hearsay testimony than our record for the forty years of our professional life. Respectfully,

A. SAGER.

NEW TREATMENT OF SYPHILIS.—Dr. A. Gruber, of Vienna (*The Clinic*) in an address before a scientific assemblage, advocated the plan of punishing every venereal patient the first time by a fine, the second by imprisonment, and the third by exile or the death penalty.

INTERNATIONAL MEDICAL CONGRESS.

[The following extracts are from an excellent letter in *Boston Medical Journal*, September 21, 1876. The birds-eye view of the congress thus given by an eye witness will be an excellent introduction to a careful study of the actual scientific work accomplished.—EDITOR.]

ON Monday, September 4th, Prof. S. D. Gross, President of the Centennial Medical Commission, called to order the opening meeting of the congress in the beautiful chapel of the University of Pennsylvania. An invocation by the Right Reverend Bishop Stevens inaugurated the business of the week. Prof. Gross then read a calm, eloquent, thoughtful address of welcome, in which he alluded to the difficulties and obstacles which the Centennial Medical Commission had successfully overcome, and bespoke lenity toward any portion of the arrangements which might seem incomplete.

The congress was then declared to be open. The committee on nominations consisted of four foreign and nine American delegates. They were empowered to nominate officers of the congress. They responded by nominating the list of names which was embodied in my general report. The choice of Prof. Gross as president evidently gave universal satisfaction. He accepted the office rather as a compliment to Philadelphia than to himself, but we may believe him to be in error here. He assured the congress that this was the greatest honor of his life. As president, he was dignified, courteous and skillful, and we had reason to be proud of the manner in which he attended to the details of his position.

The addresses which were read in general congress were, without exception, eloquent, well written, and of such interest as generally to hold the entire audience. Comparison of their relative merits would be misplaced. But I may say that the wise and thoughtful address of Dr. Bowditch on Hygiene and Preventive Medicine, which it was voted to distribute largely to governors of States and Territories, and to presidents of all regular medical organizations throughout the country, will probably work the greatest usefulness to the people at large; and that the brilliant, caustic address of Professor Chaillé, of New Orleans, on the inanity of the medico-legal status of America, and the inefficiency of our present general system of medical education, will, it is hoped, redound to the better preparation of medical graduates in the United States. It was frequently remarked during the week that these addresses were objectionable in an international congress, because they were strictly national in character, being for the most part sketches of the history of American medicine. But I think it may be hoped that the foreign delegates found them interesting in a historical and literary sense.

This congress was the outgrowth of the centennium of our nation's history. It would be almost cruel, then, to condemn the national spirit of these addresses, although under circumstances less historical they might with more wisdom have had wider geographical application, and might have been less overshadowed by the wings of our national bird. But, after all, is it not pardonable in Americans who have become venerable in medicine if they speak enthusiastically, boastfully even, of the surprisingly rapid growth of medicine in the United States, as well as of the noble men who have contributed so much to the reputation which the profession in this country have won? This gentle criticism is the sole stricture I have to offer upon the programme of the congress. It must be remembered, however, that foreigners who did not attend the congress had been invited to deliver addresses in general session. Had they done so, the strictly domestic character of these lectures would probably have been less evident.

My reference to the programme recalls its great usefulness and practicality. Delegates had only to refer to the work laid down for each day in order to decide in what direction to devote their time. Dr. Bowditch very truly remarked that if the American Medical Association would furnish its members with just such printed programmes of the daily work at their meeting, it would be more systematic and accomplish more.

The printed programme was not the only convenience of the congress. Every morning there were distributed newly-printed lists of delegates who had already registered their names. An immense poster in a prominent place gave the localities and rooms of the sections. Each room was indicated by the proper printed announcement, and even the lunch room, the whereabouts of which hungry men commonly discover without aid, was pointed out by a large paper hand. The noon lunch, by the way, was one of the features of the congress. With other things each delegate received a lunch ticket bearing six coupons. The lunches, furnished by the physicians of Philadelphia, were good and plentiful. Delegates, especially the workers, were much pleased to find that they could obtain tiffin without leaving the building.

One of the lower rooms was appointed with every convenience for correspondence; daily papers were there, and there delegates met for social converse. Another room was devoted to post-office business, and there delegates found their letters. A third room was used for registration purposes.

On the lower floor of the building three of the recitation rooms were used by as many sections. The general congress and the remaining sections had separate rooms on the second floor. Every arrangement was convenient; there was no hitch, rub, or jar, and as a result everybody praised the executive committee in unstinted language.

Another element in this general success was a delightful freedom from noise of every sort. There is no such enemy to the smoothness of section work as the clatter of wheels, talk, noise of footsteps, etc. These were noticeable by their absence. So, then, the mechanical working of the congress was as frictionless as that of a Frodsham watch.

I have wandered from the meetings to minor details by reason of that pleasant anxiety to tell everything first which is invariably observable when one is happily satisfied with all parts of something enjoyable which one is trying to describe. I do not mean to take up the meetings in detail, but merely to give you general impressions.

At the opening session I fancied there was unusual interest because of the presence of distinguished foreigners. Everybody hoped that they would carry away pleasant impressions. This feeling had its influence in keeping things well in hand.

When the names of officers of the congress were announced, hearty applause followed the mention of Mr. Lister, of Edinburgh, as president of the surgical section, of Tufnell as vice-president, of Dr. Robert Barnes, of London, and Prof. Simpson, of Edinburgh, as president and vice-president of the obstetrical section, and of R. Brudenell Carter as president of the section on ophthalmology. These distinguished men at once gave immense character and interest to their respective sections. On the second day of the congress, Mr. Lister, by invitation of his section, explained his antiseptic system of dressings, including details of his many experiments upon bacteria. He spoke two hours and a half, was then questioned in regard to details, and spoke another hour. It was rather a doubtful thing for him to do, that is, if he were aware of the amount of time he was occupying. But the close and unceasing attention with which he was followed was not only a fine compliment, but may have been the reason of his prolixity. As a speaker Mr. Lister is ready and comparatively fluent. He is a handsome man, but upon the platform loses in good looks. Compactly built, with ruddy cheeks, side whiskers, and the shrewd, canny eye of a Scotchman, upon the platform he is apparently five feet six inches in height. You are surprised when you meet him to find his actual stature five feet ten inches. He has a laughing face, but his firm mouth and bright eye give it character. Modesty is stamped upon his every act and word, but he *does* believe in antiseptic surgery.

Tufnell, of Dublin, was not constant in his attendance, but was very interesting in his remarks on the treatment of aneurisms. In appearance he is a remarkable man: tall, powerfully built, with iron gray hair, flushed face, a clear blue or gray eye, long, prominent nose, high forehead, and a strong chin. We generally find it easy to see what we think we see. In studying Tufnell's face, wearing one moment a look of almost childlike simplicity, the next an expression of keen humor, we think we trace the characteristics of the true Irishman, but are nonplused when we learn that by birth he is not Irish but English.

William Adams, of London, is a capital teacher. Nothing could be clearer than his paper on "Subcutaneous Division of the Neck of the Femur," nor than his subsequent demonstration. He is a charming man, full of *bonhomie*, is not handsome, but has a face one likes to look at. He has a well-shaped, nearly bald head, arched forehead, heavy eyebrows, bright, steady gray eyes, unusually firm mouth, and vigorous chin, and wears short, thick side whiskers. He is a good speaker, but uses the rising inflection, so English and so un-American.

These three men, Lister, Adams and Tufnell, were the strongest of the foreign guests in the surgical section. No section worked harder nor with more fervor than this. The discussions on Mr. Adams's paper, that on "Antiseptic Surgery," and that on Dr. Van Buren's paper on "Aneurisms," were full of interest, were closely followed and thoroughly treated; but the field day was that which gave us the discussion on coxalgia, of which I sent you details in my general report.

Fancy a tilt between Gross and Agnew of Philadelphia, Lister of Edinburgh, Adams of London, Hingston of Montreal, Moore of Rochester, and Sayre of New York, and other lesser but not less earnest men! These gentlemen used no buttons on their foils. Thrusts were given in earnest. Finally it was found that Professor Gross, who led one side of the debate, would admit that although a child with coxalgia *must* have a strumous constitution, yet his ailment might be lighted up by some slight injury; and that Sayre, who was all on fire in support of his paper and as leader of the opposition, would allow that while in the majority of his cases there was no strumous taint, yet it might be present. Whereupon Mr. Lister, with a quiet smile, said, "Gentlemen, you do not seem to be far apart. I think you may easily harmonize;" and the discussion ended.

The section on obstetrics was fully as enthusiastic as the surgical, and was favored, too, by a double row of ladies, who sat statuesquely during every day's meeting. The section heard papers of great value discussed by strong men. Massachusetts was represented in discussion by Kimball, of Lowell.

By the bye, what a comfort it would be if the proper treatment of the pedicle of ovarian tumors could be found.

Dr. Barnes, of London, made an excellent president. In his absence Simpson, of Edinburgh, ably filed the chair. Dr. Barnes and Professor Simpson are as unlike in their physique and manner as two men could well be. Barnes is a little above the average height, and inclined to *embonpoint;* his head is large and bald, his eyes small but bright, his eyebrows heavy; he has fine white teeth, which he shows when he smiles, as he constantly does in conversation; he wears a full brown, peculiarly curly beard and mustache, upon a rather highly-colored face. His manner is hearty, cordial, jovial, and he is a ready talker.

Simpson has a face and head which recall saintly pictures. He is slight in figure, his dark hair is long and wavy and worn behind his ears, and he wears full dark side whiskers. He impresses you as being effeminate, but as you learn to know him and appreciate the strong earnestness of his general expression, you begin to feel his strength. The feeling grows upon you.

The section on biology was less fully attended than might have been expected. Dr. Harrison B. Allen's paper secured the largest audience; but Professor Johnston's paper on the "Microscopy of the Blood" awakened the liveliest sparring. In this connection I may as well put on record a rather sharp thing said by Dr. J. G. Richardson. Richardson remarked that he had understood Johnston to say that on examining a series of unlabled slides, laid before him by Dr. J. J. Woodward, and which bore specimens of the blood of man, the dog and the guinea-pig, he found he was liable to pronounce corpuscles of dog's blood to be those of man or the guinea-pig, and *vice versa.* This accorded with Dr. Richardson's own experience, but he would like to ask Professor Johnston whether, in case an Ananias (not Dr. Woodward) brought him a mounted specimen of blood, and covering the name, told him it was sheep's blood, and he found the corpuscles averaging about one thirty-two-hundredth of an inch in diameter, he would not be able to say, "Ananias, you lie!" "Of course," added Dr. Richardson, "by substituting for Ananias and his slide a criminal and his shirt stained by the blood of his victim, and for which he strives to account by asserting that the stain is the blood of a sheep he has just killed, we have in a nutshell the chief principle involved in this controversy."

The section on ophthalmology, ably led by the genial Dr. Brudenell Carter, of London, did much able work, and was unusually well attended.

Otology attracted only a few delegates, but the papers read were of excellent quality.

The section on mental diseases and sanitary science were supported by some of the ablest men in the congress; the attendance, though small, was far better than in the same sections at the last meeting of the American Medical Association.

There were prolonged discussions of very excellent papers in the section on dermatology and syphilology. Dr. James C. White, of Boston, was chosen president of this section, and an abler, readier, better man for that chair could not have been found in the congress.

In the section on medicine there was much earnest discussion on important questions by men like Bowditch, N. S. Davis, of Chicago, J. J. Woodward, U. S. A., Alfred Stillé, of Philadelphia. But the section would not assume the responsibility of opinions expressed in any of the papers read before it.

In short, as you may see, all was earnestness and faithfulness, in whichever direction we may turn. The sections most fully attended were the surgical, obstetrical and medical, but all, without exception, did good work. There was no shirking. But few delegates were absent at the exposition. The whole affair was a constant source of enjoyment; there were no quarrels; all was harmonious, and speakers, no matter how hard they hit, were invariably courteous. As to the quality of the work done, Dr. Barnes told me he had never in any London society seen better section work or more general earnestness of interest than in his department. Mr. Lister and Mr. Adams said the same in regard to their section. Foreign delegates evidently found that the American physician possesses higher attributes than they had anticipated.

There was a noble-looking audience at the morning sessions. The many gray heads and earnest, manly faces, ripe with experience, the deep interest in every word and act, the constancy of these men in their attendance, were deeply impressive. It was a new era in American medicine. May we not hope that the American Medical Association, which, if it do not have Lister and Adams, Barnes and Simpson, Carter, Hueter and Engelstet, still has among its members men equal to any of these, but who neglect their duty—may we not hope that this association, incited by the glorious success of the International Medical Congress, will put forth more strength?

As an *entremet* the congress was invited on Wednesday evening to listen to Dr. Woodward's paper on "The Medical Staff of the United States Army and its Scientific Work." The lecture attracted an audience who were richly entertained.

The social side of the congress included the reception given by the physicians of Philadelphia on Monday evening, the very elegant and hospitable receptions given by Drs. Wilson and Thompson on Tuesday evening, by Dr. George Strawbridge on Wednesday evening, and by H. C. Lea and J. B. Lippincott on Thursday. Besides, scores of private dinners were given. Hospitality was lavishly bestowed.

The grand subscription dinner on Friday night was as enjoyable and as successful as every other feature of the congress had been. Prof. Gross sat at the head of the central table; Mr. Lister sat on his right, supported by General Hawley; on his left sat Governor Hartranft, supported by Adams, of London. After the company of two hundred had discussed an excellent dinner, Prof. Gross called for responses to several appropriate toasts. The speakers were Lister, Adams, Governor Hartranft, General Hawley, Professors Stillé, Dalton, Chaillé, Dr. Woodward, and Prof. Hjort, of Norway. All were eloquent. I wish I might make some quotations; suffice it to say that the foreign speakers expressed the warmest satisfaction with the results of the congress, their sense of personal benefit, their surprise at the forwardness of medicine in America, and their gratitude for generous hospitality.

The closing meeting Saturday forenoon was marked by a general expression of fraternal feeling of pleasure in the splendid success of the congress, intermingled with good wishes and cordial farewells.

Condensations from our Exchanges.

PRACTICE OF MEDICINE AND THERAPEUTICS.

CARBOLIC ACID—ITS VALUE AS A DISINFECTANT DURING EPIDEMIC DISEASE.—The *New Orleans Medical and Surgical Journal*, November, 1875, reports the following as embodying the experience of the profession at New Orleans:

1. Carbolic acid, as used for the purposes of "disinfection," by the Board of Health in New Orleans during the years 1867–70–71–72–73–74 and 75, has failed to arrest small-pox, scarlet fever and yellow fever.
2. Carbolic acid, as used for purposes of "disinfection" by the Board of Health in New Orleans, has, in several instances, proved injurious to the inhabitants of the "*disinfected*" districts.
3. The facts observed in New Orleans during the practice of carbolic acid "disinfection" upon a larger scale than ever before in the history of sanitary science, sustain the views held by the authorities that it is impossible to disinfect the atmosphere of an entire city, or even of a circumscribed area as of two or more squares. Cases of yellow fever have occured in succession at long intervals in houses and localities which have been most thoroughly subjected to the so-called "carbolic acid disinfection." Instances have been observed where unacclimated individuals returning from the country before cold weather had put an end to the disease, and entering those districts of the city in which carbolic acid had been most lavishly employed as a "disinfectant" have been attacked with yellow fever.
4. Yellow fever has followed its usual course, increasing up to a certain period, and then declining with the fall of temperature, and ceasing with the appearance of the frost. No connection has been traced between the decline and cessation of the disease and the amount of carbolic acid used for purposes of disinfection.

COPAIBA—ITS VALUE IN THE TREATMENT OF CROUP.—Dr. Lincoln (Transactions Medical Society District of Columbia) believes that balsam copaiba prevents the reformation of false membrane in the larynx. For many years he has used it extensively in this class of cases with the most satisfactory results. Twenty drops to a drachm are given at a dose. It is of great value even in the pseudo-membranous form of croup.

PHOSPHORUS IN CERTAIN NERVOUS AFFECTIONS.—Dr. E. Lemaire (*Bull. Gen. de Therapeutique—Journal Nervous and Mental Diseases*, January, 1876), from a large number of collected observations, concludes that phosphorus has no special value in the treatment of cases of paralysis due to acute disease or to alteration of the quality or quantity of the blood, to paralysis from cold or hysteria, from cerebral softening or hemorrhages, to cerebral tumor, to old paraplegias due to softening or extended sclerosis, to poisoning from lead. Its results are uncertain when given for fulgurant pains, or impotence, or paralysis of ocular muscles, or incomplete amaurosis.

1. In paralysis following a very limited injury, which has not caused too great damage to the nerve substance, phosphorus appears to aid in hastening a cure, even when the paralysis has lasted considerable time—a year, for example.
2. Phosphorus seems to have a favorable effect on recent incomplete paraplegias, not dependent upon any profound medullary lesion.
3. In progressive locomotor ataxia, the commencement of which is not too remote, and the symptoms not too generalized, phosphorus seems to have a favorable influence. It does not cure, but it benefits the case. The progress of the disease in some cases seems checked—it remains stationary rather than advances.
4. Phosphorus thus appears to be a stimulant—a tonic to the nervous system, capable of aiding but not of curing certain nervous affections.
5. It may be prescribed in the before mentioned diseases whenever inflammation and fever and even all cerebral excitation is absent—when the *acute* stage is *passed*, and all *irritative* phenomena have *disappeared*.
6. The administration of the remedy should commence with small doses, .015 gr., gradually increasing the dose eight or ten times, given in two doses at meal times, since taken while fasting it produces phosphoric eructations, and the medication will be too irritating.
7. Phosphorus accumulates in the system, and its effects are in proportion to to the quantity; the treatment, therefore, ought to be suspended at the end of ten or eleven days, and not repeated for several days more, and then commencing with the smallest dose, increase as before.
8. If there is the slightest digestive disorder, such as gastralgia, vomiting or diarrhœa, the treatment should at once be suspended, and only recommenced with great precautions, and it should not exceed a certain dose.
9. If at the end of a month no favorable result is obtained, the medication ought to be abandoned, as its usefulness is then sufficiently demonstrated.
10. The best preparation seems to be the phosphorated oil prepared by the method of M. Mehre.

Opium Mania Cure.—Dr. S. E. Chaille, (*New York Medical and Surgical Journal*, May, 1876), in a very interesting article, gives his method of breaking the opium habit:

1. A tyrannical persistence in total abstinence from all opiates.
2. A sympathetic assurance that this is the shortest and only road to success, and that in from five to eight days the intense suffering and sleeplessness will diminish, while appetite, courage and self-control will correspondingly increase.
3. Good feeding, with milk punch, and all the nourishment the stomach will bear.
4. Such simple remedies as the varying symptoms seem to indicate. Of these none so mitigated the symptoms as digitalis.

Quinine Bromohydrate. — M. Gubler (*Jour. de Ther.— Medical Record*, February 12, 1876), from a study of this drug, concludes:

1. The bromohydrate of quinine (bromide of quinia), corresponding to the sulphate of the same base, is more soluble, and contains more of the alkaloid than the latter.
2. It possesses the physiological properties of the salts of quinine in general, and probably also the therapeutic virtues of its officinal congener.
3. The action of the bromohydrate of quinine seems, however, to differ from that of the sulphate, not only in the slight degree of cinchonism produced by it, but also by a marked tendency to nervous sedation and hypnotism.

4. The combination of these qualities especially adapts it to the treatment of the congestive and febrile affections which attack the nervous system, neuralgias due to neuritis, irritative neuroses, cerebral hyperæmias, etc., in the treatment of which it has afforded excellent results.

5. The bromohydrate of quinine was remarkably efficacious in a case of intractable vomiting. It has proved of great service in a number of affections ordinarily amenable to the action of the sulphate of quinine, visceral or articular congestions—whether of diathetic origin or not—rheumatic or gouty symptomatic fevers, or fevers a frigore, etc.

6. The remedy has been given in doses of from six to fifteen grains a day in divided doses of three grains at a time, either in the form of pills or by hypodermic injection.

ARSENIC—RULES FOR ITS THERAPEUTIC USE.—Dr. L. D. Bulkley, (*New York Medical Journal*, August, 1876), in an exhaustive article on the use and value of arsenic in the treatment of skin diseases, reaches the following conclusion:

1. Arsenic, when administered in medicinal doses, has quite another action from that manifested by poisonous doses. The average dose of the former is one-twenty-fourth of a grain of arsenious acid, while the smallest toxic dose is placed at two grains.
2. Arsenic in medicinal doses does not produce any slow poisoning, but has been administered for months or years in quantities a small portion of whose aggregate amount would destroy life at once.
3. Arsenic given by a careful practitioner in doses to be effective, need never produce any symptoms which should cause regret.
4. Arsenic is eliminated very rapidly, chiefly by the bowels and kidneys, so that the urine shows evidences of it in a few hours. No trace of it can be found on careful analysis of the body after death, two weeks after the last dose of arsenic. Arsenic, therefore, does not accumulate in the system.
5. The first symptom of a full dose of arsenic is usually a fullness about the face and eyes, and conjunctive irritation and tenderness. This need not be exceeded, but may often be kept up with advantage to a slight degree till the disease yields. Before any harm is done by arsenic, either this or a slight nausea or diarrhea manifests itself.
6. Arsenic should always be given with or just after meals; it is often best to give it alone or with a small amount of bitter infusion.
7. The bowels should be first well purged, and an occasional laxative will both assist the action of the drug, and prevent or modify some of its unpleasant effects.
8. If the urine becomes loaded and the tongue coated, it is best to stop the medicine for a short time, and give diuretics. Some of these disturbances can be prevented by combining an alkali with the arsenic.
9. The most serviceable forms in which to use arsenic, named in the order of their value, are: solution of the chloride of arsenic, solution of the arseniate of potassa, that of the arseniate of soda and the arseniate of ammonia, arsenious acid, iodide of arsenic, and the arseniates of iron and quinia.
10. The dose of arsenic, small at first, is to be increased slowly until some of its physiological effects are manifested or the disease yields; it may then be somewhat diminished.
11. It is very important that arsenic be taken very regularly and persistently, and always under the supervision and frequent inspection of the physician.
12. Arsenic is valuable in chronic rheumatism, hence is useful in arthritic eruptions. It is serviceable in certain neuroses, as chorea and neuralgia; therefore in skin diseases with neurotic elements; it possesses anti-malarial properties, and is consequently serviceable in diseases of the

skin showing periodic symptoms, as intermittent urticaria, etc.; likewise in patients with other skin diseases, who have been exposed to miasmatic influences.

13. Arsenic is certainly valuable in psoriasis, eczema, pemphigus, acne, and lichen in proper cases, and when due regard is paid to the secretory organs and to diet and other elements of general health, of less certain value in lupus, ichthyosis, sycosis, verruca and cancerous disease. It is absolutely useless or harmful in the syphilo-dermata, the animal and vegetable parasitic diseases, in elephantiasis græcorum and arabum, in purpura, true prurigo, herpes zoster, scleroderma, molluscum contagiosum and fibrosum, keloid, vililigo, nevus, etc.

14. The only local application of arsenic which is justifiable is either one where the strength is so weak and the extent of its use so small that there is no danger from absorption, which may occur when not expected, or one of such a strength as to kill adjoining tissue at once, and so prevent absorption.

DISEASES OF WOMEN.

A New Method of Using Sponge Tents in Dilating the Cervix Uteri.—Dr. T. H. Seyfert (*Medical Times*, July 8, 1876) gives the following method of obtaining the benefits of compressed sponge while avoiding its dangers. The apparatus consists of a small metallic or rubber tube, holding on its perforated extremity a sponge tent, which is completely enveloped by a closely-fitting, thin piece of India rubber. The rubber, while permitting the sponge to dilate to its fullest extent, prevents it from absorbing fluids from the canal and protects the cervical mucous membrane from abrasions. Water reaches the sponge through the tube which has upon its vaginal extremity a distensible rubber ball for its reservoir. Instead of limiting the tent, it may be made to envelop the entire apparatus, thus keeping the tube in constant contact with the water, which by entering the perforations made in the tube readily finds its way to the sponge.

Uterus and Ovaries Successfully Extirpated.—Dr. E. Kimball (*Bost. Med. Jour.*, July 13, 1876,) reports a successful case of the above operation. Patient was thirty-six years of age, married eight years, had one child seven years old; first noticed a tumor in left inguinal region Sept., '74. She was tapped once, fifteen and one-half quarts of a pale yellow serous fluid being removed. The operation was performed very carefully. The mass consisted of twenty pounds of straw-colored fluid and five pounds of solid material, the latter consisting of the cyst, the fibrous growth, both ovaries, parts of the suspensory ligaments of the uterus, and the uterus itself. The patient fully recovered without any untoward symptoms.

Uterine Fibroid Destroyed by Two Doses of Ergot.—Dr. J. B. Crandall (*Chicago Med. Jour.*, Aug, '76,) relates an instructive case, illustrating the behavior of some uterine fibroids. The patient was a lady aged 37, single; had experienced uterine trouble over twenty years. One year ago noticed a hard spot below and to left of umbilicus; was examined by Prof. Byford last December. He found a uterine fibroid extending almost as high as the umbilicus. He prescribed 30-drop doses of Squibb's fluid ext. ergot three times a day. Pains began after the second dose, were very severe, lasting for forty-eight hours. There was more or less uterine hemorrhage; temperature and pulse increased; was pain and tenderness over bowels. Twenty days after taking the ergot she began to pass from the uterus small masses of fibrous growth; this discharge continued for about ten days; the larger pieces were much diseased and very offensive. The volume of the uterus was much diminished, its tenderness and hardness abated. By February 14, 1876, the uterus had resumed its normal size and position, and the patient entirely recovered.

Large Fibroid Tumors Removed by Hysterotomy.—Prof. Hegar (*Berlin Klin. Wochen.—Lond. Med. Record*, May 15, 1876,) relates two successful cases of this operation. The method of operating was as follows: The incision extended from six centimetres above the umbilicus to one centimetre above the pubes; some adhesions of the omentum in front were ligatured and divided; the chain of an écraseur was carried by means of a bent sound, round the pedicle of the tumor; the chain was then attached to the écraseur and tightened; the point of the tumor was then separated from the abdominal wall to which it was adherent, and the tumor itself was drawn out of the abdomen; a strong silk ligature was passed through the pedicle, for additional security, and the tumor cut off beyond it. A double wire was passed through the middle of the cervix; the wires were brought round below the ovaries at each side and tightened by Cintat's serre-nœud. Above these, for the sake of security, a third wire was passed around the whole mass, and then tightened and twisted. and afterwards removed. The uterus and ovarics were then cut off, the surface cauterized, and the stump was fixed in the angle of the wound by two long needles passed through it and through the abdominal walls, the two serre-nœuds being left in position. The first patient left her bed in a month, the second at the forty-first day. Hager says that the great breadth of the stump, and its richness in vessels, renders it more difficult to manage than the pedicle of an ovarian tumor.

PUBLIC HEALTH.

Privy Vaults of Brooklyn, N. Y.—Dr. B. A. Segur (*Report Med. Society, King's Co.*, July, 1876), in a paper on "filth in cities and villages," says, in Brooklyn there are 40,000 privy vaults in which excreta are accumulated, decomposition is going on, morbid germs are multiplying, zymotic ferments are at work, diarrhœal and dysenteric and fever stools are ripened to infective stages. The mechanical construction and all the appliances of every one of these vaults is such as to insure the utmost possible access of this liquid and gaseous *materies morbi* to the soil and to the atmosphere. With the rise and fall of the water in the soil—the ground water—is the varying solid, semi-solid or liquid state of the contents of these vaults, and the circulation between the soil and the vault goes on until the prolonged dry season has dried the soil and the vault, and then the filth-soaked soil exhales dysentery and typhoid fever into the atmosphere.

At longer or shorter intervals the contents of these vaults left from ground soakage and air pollution are removed. In the busy season a hundred loads are each night taken from the vaults in buckets which are carried to the streets, poured into the carts and dragged through miles of the populous city to the offal dock.

He recommends the daily removal of the fecal matter in closed receptacles.

Brooklyn, N. Y.—Its Sewers.—Dr. J. H. Raymond (*Med. Society King's Co. Reports*, August, 1876) gives as an illustration of the evils connected with imperfect sewerage the following: "At the foot of Bond street, Brooklyn, N. Y., the feces and urine from forty thousand people are discharged from sewers. Annually the feces amount to two thousand tons, and the urine to one hundred and sixty thousand barrels. This mass of filth is discharged into a large open sewer called Gowanus Canal. In it is no current; the filth sinks to the bottom and remains until the mouth of the canal threatens to be obstructed or navigation impeded, when it is dredged out. Every low water the sun pours its rays on this heap of filth, gases are generated, rise to the surface, and are carried off by the winds. As the canal is located in the heart of the city, no matter from what direction the wind blows, it carries with it to thousands of the population the exhalations of this pest hole. After showing that water closets are not to be tolerated in tenement houses and the houses of the careless, he concludes that the time must come when the feces and urine of Brooklyn will be removed as frequently as its ashes and garbage, and when its inhabitants will feel as much aggrieved and as prompt to complain and press upon officials the neglect of the scavengers who fail to remove daily the excreta, as they now are to complain of the contractor who leaves their streets unswept and passes by their ash barrels.

SURGERY.

Inflammation of Lymphatic Glands, followed by Lymphorrhagia.—Dr. Deprés (*Gaz. Med. de Paris—Med. Record*, April 29, 1876) concludes a paper on this subject as follows:

1. Suppurative adenitis and suppurative lymphangitis are generally followed for twenty days after the opening of an abscess by a flow of lymph that retards the cicatrization of the incision.
2. This flow of lymph may assume enormous proportions and constitute a *lymphorrhagia*.
3. The lymphorrhagia consecutive to a suppurative adenitis is more considerable than that following a suppurative lymphangitis.
4. The more or less abundant lymphorrhagia is the real cause of the fistulas consequent upon suppurative adenitis in healthy or scrofulous subjects.
5. Compression, where it is applicable, arrests the lymphorrhagia in a few days, and where compression cannot be used cauterization will arrest it, but more slowly.
6. The flow of lymph and the lymphorrhagia after suppurative angeioleucitis and adenitis are a perfect demonstration of the primitive lesion of the lymphatic glands and vessels.
7. From these points it follows that compression applied for several days in suppurative adenitis and angeioleucitis is the best means of preventing the occurrence of lymphatic fistulas.

Inflammatory Process—Its Nature.—Dr. Thin (*Edinburgh Med. Journal*, March-April, 1876) in a series of articles makes the following points respecting the inflammatory process:

1. The changes in an inflamed tissue are divisible into two categories, the *destructive* and the *reparative*.
2. The destructive changes consist, as regards the fibrillary tissue, in swelling, softening, chemical change and disintegration; as regards the cellular elements, in division of the nuclei into small parts, swelling, death and disintegration of the cell. The destructive change extends towards the blood vessels or directly implicates them; the weakened vessel permits the escape of the fluid and formed elements of the blood.
3. When the cause of primary destruction is removed or exhausted, the process of repair begins by organization of the plasma and colorless blood cells. From the former the ground substance (fibrillary tissue, etc.) is formed; from the latter all the cellular elements of what form sores. Flat cells, spindle and stellate cells, non-striped muscle cells, epithelial cells, all owe their origin to the lymph or colorless blood corpus-

cles. But the type of cell once established by the development of the original corpuscle, there is afterwards neither retrogression nor metamorphosis. With the development of the free lymph cell of the fluids into a fixed element of the tissue the power of reproduction is lost.

TOTAL DEAFNESS ON ONE SIDE—ITS DIAGNOSIS.—Knapp (*Archives Ophthalmology and Otology*) gives the following tests for one-sided deafness:

1. In one sided complete deafness a tuning fork vibrating on the incisor teeth or the middle line of the skull is heard on one side only. Its sound is enforced when the ear of this side is closed, but remains unchanged when the other side is closed.

2. A vibrating tuning fork moved up and down before a healthy ear causes an enforcement of the sound, like puffs of a locomotive, as often as it passes the level of the auditory canal. When moved before a totally deaf ear, its sound is still perceived, *i. e.*, by the other ear, but uniformly, without periodic enforcement.

3. The pneumatic otoscope in a healthy ear makes the movements of the membrana tympani audible as a deep but distinct sound, whereas in a totally deaf ear it produces no sound at all.

ABDOMINAL ABSCESSES—THEIR CAUSES.—Dr. T. Grainger Stewart (*Medical Times and Gazette*) gives the following causes of abdominal abscess: Typhoid ulceration of the intestine, tubercular disease of the intestine, malignant disease, foreign bodies in the cœcum or vermiform appendix, perforation of the small intestines or stomach, hepatic suppuration, disease of the kidney, diseases of the bone, the ovaries and uterus.

HÆMORRHOIDS TREATED LOCALLY BY THE USE OF LIQUOR BISMUTHI.—Dr. John Cleland (*Practitioner*, January, 1876) strongly recommends the use of liquor bismuthi in certain diseased conditions of the rectum. In severe hæmorrhoids usually three parts are affected—the integument, the mucous membrane and the hæmorrhoidal veins. As the veins cannot be reached by local medication, those comparatively few cases in which they alone are involved must be treated in other ways. The integument, together with the edge of the mucous membrane up to the grasp of the sphincter, is easily reached, and may be treated in a variety of ways, according to circumstances. But when the mucous membrane is considerably involved, no application is so satisfactory as an enemata of liquor bismuthi—a dessert spoonful to a wine glass of starch. The injection is done after the patient has gone to bed, and repeated each night. Not only in hæmorrhoids, but in cases of prolapse of the rectum, the doctor reports equally good results from this use of bismuth.

A NEW BURN MIXTURE.—Mr. Charles Rice (*Amer. Jour. Pharmacy*, August, 1875) gives the following formula for a mixture which combines transparency, cleanliness, body, rapidity of drying and flexibility: Take of best white glue (extra) fifteen ounces; break it into small pieces, add to it two pints of cold water, and allow it to become soft. Then melt it on a water bath, add to it two fluid ounces of glycerine and six drachms of carbolic acid, and continue the heat on the water bath until a glassy, tough skin begins to form over the surface in the intervals of stirring. The mixture may be used at once after the glue is melted and the glycerine and carbolic acid are added, but when time allows it is advisable to get rid of a little more of the water until the proper point is reached. On cooling this mixture hardens to an elastic mass, covered with a shining, parchment-like skin, and may be kept for any time. When using it it is placed for a few minutes on the water bath, until sufficiently liquid for application. Should it at any time require too high a heat to become fluid, this may be corrected by adding a little water. It is applied by

means of a broad brush, and forms in about two minutes a shining, smooth, flexible and nearly transparent skin.

Thoracic Aneurism — Treatment by Iodide of Potassium.—Dr. Balfour (*Lect. Dis. Heart, Edinburgh Med. Jour.*, June, 1876) sums up the careful experience of eight years as follows: In every case of thoracic aneurism iodide of potassium affords speedy relief to pain and suffering of every kind, while in a few cases there has been so complete a subsidence of the tumor and relief of all the symptoms as to amount to an apparently perfect cure. In order to produce the desired effect the drug must be administered in full doses, and the only inconvenience attending it is that unpleasant symptoms of iodism are sometimes induced. A dose of thirty grains three times a day should be given from the first, as then a tolerance of the remedy is established more rapidly than if small doses be given to begin with. If symptoms of iodism show themselves, a full opiate or a dose of chloral may be given at bedtime, and, if necessary, the use of the drug may be intermitted for a day or two. Dr. Balfour believes that the action of the iodide of potassium *first* diminishes the blood pressure by acting as a sedative to the heart's action; *second*, it hypertrophied the adventitia, and possibly in some cases the media. Thus the pressure of the sac walls is diminished and the walls themselves thickened and contracted.

Strangulated Hernia Reduced by a Novel Method.—Dr. J. H. Joy (*Brit. Med. Jour.*, May 13, 1876) reports a case of strangulated hernia in which, after failure of all ordinary means for reduction, the following succeeded: Ether spray was applied to the tumor, and at the same time the bowels were inflated by a common pair of bellows. Careful pressure and manipulation of the hernial tumor attended the above means. The doctor was positive that no one of the means employed would have succeeded without the others.

Boils and Carbuncles—Their Treatment.—Dr. P. Earle (*British Med. Jour.*, July 1, 1876) directs attention to this subject:

1. **Boils and carbuncles are not mere inflammations and sloughings of cellular tissue, but specific diseases.**
2. **They are parasitic, and as such endowed with a definite life and history.**
3. **In their early stages they may be infallibly destroyed and aborted by destruction of their central stem or root, and even after this stage is passed they may generally be destroyed, and in all cases, at the very least, greatly modified by the free application of carbolic acid.**
4. **To produce this result the acid must be freely introduced into the central portion of the disease, and also into any other part where an opening exists or is formed artificially. The strength of carbolic acid used was four or five parts to one of glycerine.**

Surgical Operations in the Upper Lake States—Their Mortality Compared with that of Other Regions.—Dr. E. Andrews (*Chicago Med. Jour.*, July, 1876) has collected a variety of statistical evidence upon the above point. Desiring that his statistics shall be worthy of the highest confidence, he has carefully rejected from the lake States list all matter furnished by persons not known to be trustworthy, as well as all tables of cases published in journals, or in reports of societies, whose mode of compilation was not known to him. "The tables of Western practice here given embody with absolute impartiality the failures as well as the successes of the operators, so that they may be trusted as fair samples of the operative work of this region." A comparison of statistics respecting amputation at the shoulder shows:

1. **Amputation at the shoulder in the lake States has a mortality only half that stated in the books.**

2. It may be practiced when the parts below are so destroyed by violence or invaded by cancer as to admit of no more distal operations.

3. It should not be practiced for caries, for gunshot fractures not involving the great vessels and nerves, nor for any other condition which admits of resection.

An Automatic Method of Opening the Eustachian Tube and Airing the Tympanum.—Dr. H. S. Schell (*Amer. Jour. Med. Sciences,* July, 1876) gives the following method of inflating the tympanum:

"The patient is directed to keep the lips tightly closed, and to draw down the throat, and even to separate the jaws slightly, as if trying to yawn without being observed. The effort usually produces a yawn, and if immediately after the long inspiration which accompanies the act, or at the beginning of expiration, the nostrils are closed with the fingers, air will be felt to fill the tympanic cavity. The tympanum will remain inflated for some time, often uncomfortably if any amount of force has been used, but may be quickly eased by swallowing saliva once or twice with the mouth shut."

The various applications of this method will suggest themselves to the practical surgeon.

PHYSIOLOGY.

The Iris—Its Innervation and Movements.—M. Debouzy (*Rev. des Scien. Med.—Jour. Nerv. Dis.*, April, 1876,) in a memoir on this subject, concludes: (1.) The muscular fibres which form the sphincter of the iris, and the so called radiating bundles of the same, are only one muscle, a muscular diaphragm of the eye. (2.) When all the muscular fibres of the iris, both circular and radiating, are put in action at once, contraction of the pupil takes place, on account of the predominance of the circular fibres. (3.) This muscular contraction is due to the third cranial or motor oculi nerve alone, and it is only observed in the sensorial functions (accommodation to light, distance, etc.) (4.) The dilatation of the pupil that occurs after the cessation of the action of the third pair, is not from excitation of all opposing nerves, nor a muscular contraction, it is solely due to the elasticity of the iris, and is a purely passive phenomenon. (5.) The sympathetic has no action on the muscular fibres of the iris, it is purely vaso-motor. (6.) When the sympathetic acts as a vaso-constrictor it dilates the pupil. Does it augment the calibre of the vessels? There is thence pupillary contraction. It does not act on the sensorial functions. (7.) The phenomena of myosis and mydriasis, depending upon the great sympathetic, are in all respects comparable to the vascular phenomena that produce flushing or pallor of the face. Pupillary contraction may therefore be provoked by (1) the contraction of the muscular fibres, (2) vascular dilation. (8.) The third pair reacts from the optic nerve alone, and is independent of the general sensibility. When we excite a sensory nerve and obtain a contraction of the pupil, this is the result of a reflex action from the sympathetic, with participation of the optic nerve or of the motor oculi communis.

The Vaso-Motor Nerves.—The definite conclusion upon this subject reached by the eminent physiologists, at their section in the Brussels meeting of the International Congress of last year, are given (*Jour. Nerv. and Mental Diseases*, April, 1876,) as follows:

The vaso-motor nerves form a part of the vegetative nervous system; they have their origin principally in the cord and medulla; they rise necessarily from the supra-spinal portion of the encephalon, the ganglia of the sympathetic, those scattered through the periphery on the tract of the nerve fibres. In going from the spinal axis to the lateral cords, the vaso-motor nerves take the course of the anterior roots—they pass to the vessels, either with spinal or cranial nerves, or accompanying the arteries. The vaso-motor nerves, in their course across the cord, remain in the half in which they rise. The influence of the parts of the brain situated above the corpora quadrigemina, on the contrary, is crossed. In point of view of its physiological composition we may consider the vaso-motor apparatus as constituted by the principal centers and nervous connecting fibres uniting them to each other. These centers are the cerebro-spinal axis on the one hand, and on the other the collection of nerve cells distributed to the periphery of the vascular system. The connecting fibres are of two kinds, and the vaso-constrictors and the vaso-dilators in part centripetal and in part centrifugal. Both these kinds of fibres are doubtless often united in the same nerve; nevertheless, the vaso-dilator fibres are usually most numerous and active—they relax the vascular walls and diminish the activity of the tonic centers. Moreover, vaso-constrictor and dilator fibres, starting from the periphery, enter the tonic centers, and these again in their turn give out fibres exclusively constrictor, which spread themselves on the walls of the vessels.

GANGLIA UPON THE POSTERIOR ROOTS OF THE SPINAL CORD—THEIR STRUCTURE AND FUNCTIONS.—Dr. Jewell (*Jour. Nervous Diseases*, July, 1876,) from a consideration of the above subject reaches the following conclusions:

The ganglia upon the posterior roots of the spinal nerves contain cells which are peculiar as compared with the cells either of the cerebro-spinal axis or of the sympathetic ganglia. They approach more closely those of the sympathetic, but differ from them chiefly in the fact of being much more frequently uni-polar. Perhaps in a majority of cases the cells of the posterior ganglia had only a single process, but there were numerous exceptions in the form of apolar or embryonal cells. Both of the processes frequently take their origin upon one side of the cell and made a partial or even two turns around it before making their departure. In most instances the processes are furnished with myeline. Occasionally the cells have two processes, one direct, the other spiral—the direct containing myeline throughout, the spiral containing myeline only exceptionally, which can be seen only at some distance from the cell. The direction of the processes, almost without exception, appears to be towards the periphery.

There is no demonstrable connection between the sensory fibres and the cells of the posterior spinal ganglia.

If the sensory roots are divided peripherally to the ganglia, the muscles anatomically related thereto undergo a slow atrophy, much slower than when the motor roots alone were divided. If the sensory roots were divided internally to the ganglia, no effect whatever upon the muscles would be produced.

The function of the ganglia appears to have reference to parts lying outside the spinal cord and independent of it. They exercised a trophic influence over the sensory nerve fibres.

RESPIRATORY MOVEMENTS—THEIR PHYSIOLOGY.—Dr. Isaac Ott (*Jour. Nervous Diseases*, July, 1876,) from a careful study of this subject, concludes that (1) Hereny and Beuer have shown that the pneumogastrics contain fibres which carry antagonistic impulses from the lungs to the respiratory centers in the brain, calling out both inspiration and expiration; that dilatation of the lungs increases the heart frequency, and that the cause of this is that the pulmonary sensory nerves carry irritations to the brain, which reduce the instability of cardio-inhibitory center seated here. (2.) The rapidity of the heart in glass-blowers is due to a lowered tonus of the medullary cardio-inhibitory center, which has been produced by the frequent irritations of the sensory nerves ending in the lungs, by the act of blowing.

VIOLENT PAIN—ITS EFFECTS ON ANIMALS AND MEN.—Mantegazza (*Hirsch Jahresbericht*), by experiments proved that in animals violent pain produced loss of appetite, dyspepsia, nausea, arrest of the digestive process, vomiting and diarrhœa, and if continued, great weakness and considerable loss of weight and greater sensitiveness to all injurious agencies. In man we find that severe neuralgic pain produces dyspepsia, want of appetite, coated tongue, pallor and anæmia, weak pulse, cold extremities, depressed, excitable states of the system, great sensitiveness to external injurious influences.

CALORIFIC ACTION OF CERTAIN REGIONS OF THE BRAIN.—M. M. Eulenburg and Landois (*Lond. Med. Record*, May 15, 1875,) give the following summarized results of experiments made by them with reference to the above question. (1.) The destruction of certain anterior cortical regions of the brain is followed by a very considerable augmentation of temperature in the extremities of the opposite side This increase shows itself immediately, even before the wakening of chloroformized animals, and before the performance of any spontaneous movement. It may amount to 9° or 12° Fahr. It is also observed that it shows itself more clearly sometimes in the fore and sometimes in the hind paw, according to the parts destroyed. (2.) The active calorific region of the cortical surface specially comprises the posterior and lateral portion of that great unciform convolution, answering in the dog to the anterior central fold in man and apes. The regions acting on the anterior and posterior limbs are separated from each other. The former is situated slightly forward and at the side. The superficial destruction of the folds situated in front has no heating effect, or this effect is very weak and probably secondary. In the same way destruction of the posterior and occipital posterior convolution is not followed by any calorific effect in the limbs in question. (3.) After the destructions followed by successful results, disturbances of motility and of muscular sense in the extremities of the opposite side are mostly observed when the chloroformed animals regain consciousness. These disturbances apparently depend on the lesion of the motor apparatus situated in the same region of the hemispheric surface. (4.) The increase of temperature in the opposite limbs is generally kept up some time after the lesion, although gradual and very decided differences of that kind from two days to several weeks exist. (5.) The isolated electric excitation of the cortical region in question, performed with rather weak currents, is followed by a very weak and very evanescent lowering of the temperature, varying from 0.2° to 0.6° cent. This lowering is independent of the motor action of the irritant, as it is the same in curarised and non-curarised animals. (6.) Irritation and destruction of the spinal marrow (lumbar region) and the peripheric trunks (sciatic nerve), performed at a somewhat long interval after the destruction of the above named regions of the brain and the reëstablishment of the uniformity of the temperature, still act in the usual manner on the temperature of the posterior extremities.

RELATION OF THE INTRA-CRANIAL TO THE INTRA-OCULAR CIRCULATION.—Dr. J. C. Shaw (*Jour. Nervous Diseases*, April, 1876,) reports a large number of experiments upon men and animals relative to the above question, but in each case he found that the intra-ocular was independent of the intra-cranial. Experiments and observations by others, in the main support his conclusions. Drugs like quinia, which produce cerebral hyperæmia and congestion of the membrana tympani in man, have no effect on the circulation within the eye.

Editorial.

NOTICE TO CORRESPONDENTS, ETC.—Communications intended for publication, and books for review, should be directed to "Editors of Detroit Review of Medicine, care of E. B, Smith & Co., Detroit."

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Original Articles, Reports of Medical Societies, Observations, Correspondence, News, etc., of general interest, are respectfully solicited from every source. Articles should be practical and carefully prepared.

The Editors will not be responsible for statements made over the names of contributors.

PATENTS IN MEDICINE AND SURGERY.

THE late president of the American Medical Association, in his annual address, called especial attention to the subject of patents in their relation to physicians.

The code of ethics expressly declares that "it is derogatory to professional character for a physician to take out a patent for a surgical instrument or any other invention." Dr. Sims quotes an instance in which a physician invents a galvano-cautery, and thinks that because he cannot realize a handsome fortune from the invention, therefore he is robbed to enrich the instrument makers. He recommends that a few brave men assert their inalienable rights, and establish a precedent that would soon become a law and render this clause of the code, as in other instances, a dead letter. He quotes approvingly Dieulafoy's course in patenting his aspirator. Briefly, Dr. Sims teaches that physicians, like all other men, should be permitted to exercise their inalienable right to patent any invention they may chance to make. In order that his teaching may be adopted, all that is needed is a sufficient amount of courage on the part of a few brave men. Let these patent a new pessary, a new baby's cordial, a new opium cure, and the code will become a dead letter.

Let us suppose for a moment that Dr. Sims' plan for increasing the labors of the patent office prevailed with the profession, and what would be the results?

1. Patent pessaries, specula, probes, knives, scissors, bougies, catheters, etc., etc. Patent medicines would then become a specialty in the profession; patent methods of treating fractures, restoring dislocated limbs, delivering babies, checking post-partum hemorrhage; patent methods for analyzing the urine, feces, blood tissues, etc.; patent processes for preparing microscopical prepara-

tions; for making *post-mortem* examinations; patent inventions in treating pleurisy, gonorrhea, etc. In short, all that physicians contribute to our science or art they would cover with a patent, and in this manner obtain compensation for their inventive genius. Only think how great a fortune Dr. Sims would have accumulated had he been permitted to patent his speculum, probes, catheters, silver wire sutures; his operation for vesico-vaginal fistula, and his invention to relieve sterility, etc. How would this state of things react on the profession in its scientific and practical work?

Clearly there would be less of mutual aid among physicians. Each would be looking after his patent—existing or prospective—lest some one should steal his thought and realize his reward. Physicians would not tell their neighbors of their inventions until they had secured their papers, and after this others would listen to the wonderful advantages of the patent with a feeling that the inventor had some money at stake, and that his story must be regarded as exaggerated.

2. The increased expense of instruments, operations, medicinal preparations, imposed by a system of patents, would be a simple tax upon those who used such appliances. With our present system all are aware of the enormous expenditure necessary in order to procure the necessary means for doing the best possible for our patients. Even now such expenditure is impossible to many and a great burden to most. Were the public expected to provide for the profession all these prospective patented inventions, we need not care for the expense. As it is, the instruments do not, on the whole, increase the physicians' income, while they are no insignificant drain upon it. To lay a tax upon the profession under such circumstances would greatly be like asking it to make bricks without straw—it simply could not pay it.

3. Medical societies would scarcely be needed, as all new thoughts must come through the patent office reports. If they existed it could scarcely be possible that there should be a frank brotherly love, and earnest desire for the advancement of our common profession. Love for the almighty dollar must be uppermost, nor can we conceive how it should be otherwise. As well expect the patentees of various nostrums to form a society for mutual counsel, good feeling and aid in laboring for the good of mankind.

When the question is thus pushed to its legitimate end, it becomes to every lover of the medical profession palpably absurd, and unspeakably degrading.

But, says one, might we not patent some inventions and not others? Yes, we might, but common *justice* demands that if a price must be paid for one kind of original thought or work in the profession, a price should be paid to all kinds of such thought or work. Either all such advances in the art and science of medicine should be freely contributed or all should be paid for. Since the earliest times our profession has been famed for its self-sacrifice. Shall we throw away the record of thousands of years, and plant ourselves upon our own individual selfishness? Such we understand to be the meaning of Dr. Sims' proposal.

Does the code prevent a physician from holding a patent on any invention that is outside the collaterals of medicine or surgery? No. The code obviously is for the regulation of physicians in their relations as professional men. Now, it strikes us that, fairly interpreted, the code permits a physician who is also a farmer to patent a plough if he so desires. Further, it seems to us equally plain that if an invention is used for purposes outside the profession as well as within it, then a patent is permissible, in so far as it pertains to such outside uses.

Says one, all this may be proper when viewed from the standpoint of the profession. Patents are not surely for its interests, but how is it to the inventor? Shall he reap no reward for his time and labor? Let us take Dr. Sims as an example. Who shall say that he has received no reward for his inestimable inventions? Thousands of rich patients—with fat fees—honored and revered by the entire profession—a name enrolled among the immortal. Are not these things rewards for which men labor and toil? Could anyone desire more? Money, friends and honors await every member of the medical profession whose inventive genius contributes some new means of combating disease and ameliorating the lot of mankind. It is the glory of the profession, that such rewards are spontaneously given. Who in his right mind would propose a change, so as to extort a money tribute by law?

MEMORANDA.

The effort to establish the *concours* in the University of France has failed.

The deaths at Lansing, Michigan, for July were nine, or at annual rate in 1000, 12.17; for August twelve, or at annual rate in 1000, 16.14.

The medical faculty of Paris has recently decided to refuse all applications from non-graduates of a French school for the *authorization* to practice in France.

Two-thirds of the total population of Boston are foreigners and their offspring, and of this proportion two-thirds are Irish: so says the medical commission of the Board of Health.

The New York State Medical Society has decided that under the "Code of Ethics" it has no power to compel a physician to consult with another; anyone may choose his companion as well as his patient.

Brains prepared according to Charcot's process, viz.: steeping for six weeks in dilute nitric acid, and allowing to dry, are said to be very valuable for teaching purposes, and for recording lesions of convolutions.

The *Canada Medical and Surgical Journal* says that its original department falls far short of that of similar periodicals in other countries. Modesty and fear of criticism on the part of Canadian practitioners are given as reasons for the shortcoming.

Owing to the efforts of sentimentalists, the sentence of the murderer Pomeroy has been commuted to imprisonment for life. The next move will be to commute this sentence into freedom, and furnish the villain a chance to do other murders too atrocious to be punished.

The attendance at the late meeting of the British Medical Association, at Sheffield, England, was five hundred. The receipts of the association for the past year was £10,000, the expenditures £9,757, and its accumulated capital £3,000. It must be remembered that a large part of the above was received for and expended in the manufacture, etc., of the association journal.

The annual meeting of the Detroit Academy of Medicine was held Tuesday evening. After a paper by Dr. Munson on "Heat as a Factor in Causing Disease," a discussion, etc., the election of officers took place. This resulted as follows: For president, Geo. P. Andrews; vice-president, E. L. Tiffany; secretary, J. D. Munson; treasurer, Judson Bradley. The reports of the various officers showed that the past year had been a prosperous one.

The meeting of the German Medical Association, at Düsseldorf, June 28th, representing fifty-three hundred medical members, recommended the various local associations to adopt as the general rule of their relations to the public the translation of our code published at Munich about two years ago. It will be noted that this was only about three weeks after Dr. Sims gravely recommended to the American Medical Association that it ignore the code.

The International Medical Congress, held at Philadelphia September 4th to 9th, 1876, is reported as a perfect success. A large attendance of European and American physicians exchanged greetings, read and discussed papers, and fraternized about the festive board. All passed off decently and in order. We learn that a large amount of scientific work was done. In due time we shall endeavor to present our readers with a condensed account of this work.

Dr. J. M. Toner, of Washington, has offered to donate to the physicians of Pittsburg his own collection of medical books, valued at twenty thousand dollars. The donation is subject to two conditions: (1) A fire proof building must be erected for the library. (2) The library must be called by his name. Strange to say, thus far the library has not been accepted. Dr. Toner also offers to provide a fund whereby the proposed institution would secure the advantages of annual lectures on medical and scientific subjects.

We have received the third number, Vol. I, of the *Ohio Medical Recorder*. It is a lively journal, edited by J. W. Hamilton and J. F. Baldwin, and published at Columbus, Ohio, by Chas. M. Cott; monthly; pages, 48; $2.00. It is the organ of the Columbus Medical College, and the rival of the *Ohio Medical and Surgical Journal*. Ohio is a land flowing with medical journals and medical colleges. With abundant excellent talent, it is a pity that it could not be concentrated in one college and one journal, or at least one for each so-called medical centre.

The American Gynæcological Society held its first annual meeting in New York, September 13th, 14th, and 15th, 1876. Twenty papers were presented—many of them read and discussed. Details with reference to the scientific results reached will be reserved until we receive the official report. The same officers were elected for the ensuing year. The meeting demonstrated anew the fact that the best scientific work can be done by small organizations of enthusiastic workers. We understand that all newspaper reporters were excluded from the meetings. This is as it should be, and we trust that all other medical societies will follow the example.

Dr. Edward Warren, long a resident of Paris, France, writes to the *Philadelphia Medical Times* as follows: "Notwithstanding the protracted period of pupilage demanded by European universities and their presumed advantages in other particulars, their *average* graduates are decidedly inferior to those of our schools. Although the percentage of thorough scholars and profound thinkers may be greater abroad, the rank and file of the profession in America are better instructed in the principles of medicine and more skilled in the management of disease than the corresponding class of medical men in any of the countries which I have visited."

The Canadian Medical Association held its ninth annual meeting in Toronto September 2d and 3d, 1876. Many papers of interest were read and briefly discussed. The officers elected for the ensuing year were: President, Dr. H. Hingston; vice-presidents, Dr. Workman, Hon. Dr. Ross, Dr. Baird and Dr. Moran; secretaries, Dr. Zimmermann, Dr. Russel, Jr., Dr. Hannington, Dr. Almon, Jr.; general secretary, Dr. David; general treasurer, Dr. Robillard. Committees were appointed on the various branches of medicine and surgery. Delegates were appointed to the International Medical Congress. The next meeting will be held in Montreal, September, 1877.

LONGEVITY OF JEWS—ITS CAUSES.—These are stated by the *London Medical Record* as follows:

1. *Keeping of two Sundays* in a week, besides which Christian and political holidays. Thus they have about twice as many days of rest as Christians.
2. Their *employments* are devoid of *hazard*, as they do not engage in mining, mechanics, etc.
3. *Dietetics*, as enforced by biblical and traditional commands, are favorable to longevity.

4. The *sentiment de la famille* is better developed in the Jews than in the Christians. This assures to children, and aged and infirm parents a more active solicitude, to the new-born a mother's nursing, to the poor a more efficient assistance.

Their charity is unequaled, their morality demonstrated by judicial statistics. Their profound faith in Providence gives them a marked serenity of spirit and firmness of character. They rarely use alcoholic liquors to excess. They seldom marry out of their own race, and have little hereditary disease.

Book Notices.

Any book noticed herein may be had of E. B. Smith & Co., Publishers and Booksellers, Detroit, Mich.

ZIEMSSEN'S CYCLOPÆDIA OF THE PRACTICE OF MEDICINE. Vol. XI. DISEASES OF THE PERIPHERAL CEREBRO-SPINAL NERVES. By Prof. Wilhelm Heinrich Erb, of Heidelberg. Cloth; pp. 600. 1876. New York: Wm. Wood & Co.

This is the seventh volume of the series. It is devoted to that very intricate portion of medicine, "the diseases of the peripheral cerebro-spinal nerves," and is prepared entirely by one man—Prof. Erb. The old classification into functional and anatomical diseases, is, of necessity, adopted. The functional diseases are discussed under three heads, viz: "Neuroses of the sensory nerves," "Neuroses of the special sense," and "Neuroses of the motor nerves." One-sixth of the book is devoted to a consideration of "Neuralgia in general," its etiology, pathological anatomy, symptoms, course and duration, its termination, diagnosis, prognosis and treatment. Then the individual neuralgias are discussed in a similar manner. Order and exact method are evident on every page. Unlike many book-makers, the author never spends a dozen pages talking about nothing—if we have no positive knowledge respecting any matter, he frankly tells us so. We think that one good feature of the book is its frank statement of what we do not know about these diseases.

Definite fields for good, honest work, may be found here for all. On the other hand, those unfamiliar with recent work in this direction will find that our demonstrated knowledge of these diseases is very considerable. In our judgment, no honest practitioner of medicine can afford to neglect a careful study of this volume. Nor will he find it a hardship, if he love clear thought expressed in choice English, and appreciate a type, paper and presswork of such superb quality as to actually rest the eye as it reads. Of the points marked for notice as we read the book, we have space only for a few:

What is neuralgia? "In the present state of our knowledge, neuralgia must be regarded as a symptom." In many cases distinct anatomical changes are perceptible, but the mode in which they cause the neuralgia is not very clear, since the most diverse anatomical changes may produce the same symptoms. In the great majority of cases no material changes, at least with our present means of research, are demonstrable in the nerves affected; it would appear, therefore, that we are justified in maintaining the symptomatic unity of neuralgia, and the more so since it offers in the most different cases very much that is characteristic and accordant in regard to mode of appearance, course, etc." Among the predisposing causes of neuralgia, Erb gives a prominent place to the sexual periods of life—the period of puberty, the grand climactric, the occurrence of the menses, pregnancy, the puerperal state, sexual excesses, and the vice of masturbation. He endorses Anstie in believing that "it is not only the natural or unnatural excessive yielding to the sexual passion that exerts so deleterious an influence, but that unconscious excitations, even in chaste and pure-minded persons, which arise from the sexual organs of those to whom the gratification of the sexual passion is from the pressure of circumstances denied, predisposes to neuralgia." Concerning its pathological anatomy, Erb concludes that "in neuralgia we have to do with a quite definite and peculiar form of trophic disturbance in the sensory nervous apparatus;" but as to what this peculiar condition is we are absolutely ignorant. Erb says that "the diagnosis of neuralgia should include the precise determination of the seat of the lesion in the sensory nerves, the causes of this lesion, and the kind and nature of the anatomical changes that may be present." Admitting the difficulties of certain cases, he believes they may be surmounted by recollecting the following: (1) The pain is limited to a definite nerve-path, either trunk, branch or area of distribution, and that it is usually confined to one side. (2) The pain is, without any obvious reason, either intermittent or at least distinctly remittent in character. (3) The pain presents very peculiar characters, and is extraordinarily acute. (4) There are certain spots in the course of the nerve, or in the area of its distribution, that are very sensitive to pressure. (5) The pain is associated with certain sensory, motor, vaso-motor and secretory phenomena. (6) The pain is unaccompanied by any inflammatory or local symptom, or any general disturbance of health at all corresponding with the amount of subjective disorder." In the treatment recommended for neuralgia, specific directions are given respecting the use of food and electricity.

Of that obstinate affection known as "writer's cramp," and allied troubles, Erb says that the seat of their course is in the central nervous system. But whether the trophic disturbance is to be sought for in the gray substance of the cervical portion of the spinal cord, or in the cerebral peduncles, or in the gray substance of the brain, can only be determined by future investigation." In the treatment of recent cases, electricity is the most effective therapeutic agent; in chronic cases it is useless.

That peculiar and, with us, rather rare disease, called by Corvisart tetany, is fully treated. Erb attributes its essence to delicate trophic disturbances, occasioning great increase in the excitability of the motor apparatus. With this condition we should expect spasmodic attacks to occur, whenever any unusually strong stimulus affects the motor nerves.

A TREATISE ON THE SCIENCE AND PRACTICE OF MIDWIFERY. By W. S. Playfair, M. D., F. R. C. P., Professor of Obstetric Medicine in King's College, etc. 1876. Philadelphia: H. C. Lea. Pages, 576.

This is a new work on obstetrics, aiming, as the author says in his preface, "to place in the hands of its readers an epitome of the science and practice of midwifery which embodies all recent advances." Further, the author says that "he has endeavored to dwell especially on the practical part of the subject, so as to make the work a useful guide in this most anxious and responsible branch of the profession." Accordingly we find that the "Anatomy and Physiology of the Generative Organs" are disposed of within sixty-eight pages; "Pregnancy" within one hundred and forty-eight pages; "Labor" within one hundred and eighty pages; "Obstetric Operations" within sixty-nine pages; and "The Puerperal State" within ninety-three pages. Of illustrations we find two full page plates of frozen sections of the entire body during the last months of pregnancy. These are new and very instructive. Of the one hundred and sixty-six wood cuts, it is enough to say that the author found most of them so ancient that it was difficult or impossible to trace their origin; hence he could not give credit. Still, although old friends to those familiar with other obstetrical works, they are none the less valuable to the student.

Concerning the claim of the book to be an "epitome of our present knowledge of midwifery," we are prepared to say that it is well founded, at least in so far as one man could compress it within so small a space. Although written by an Englishman, in an English metropolis, numerous references are made to the labors of American obstetricians.

As a whole, the work is smaller than that of Leishman, and larger than Meadows'. Leishman was rendered more valuable to the American student by the additions of its editor, the late Dr. Parry. The three books may be fairly called rivals—especially those of Leishman and Playfair. In fact, a thorough comprehension of either will furnish a sufficient book basis for a correct practice of the obstetric art.

The style of Playfair is easy, yet strong and clear, strikingly free from useless technicalities, and well adapted to attract even an indifferent student. Concerning the precise mode in which the menstrual blood escapes from the vessels in the mucous membrane of the uterus, he says: "That the epithelial lining of the uterus is discharged may be taken as proved, for masses of epithelial cells may always be detected in the menstrual fluid, and this could hardly occur without the capillaries being laid bare. Whether, when this is effected, the blood escapes through minute lacerations of the exposed vessels, or by transudation through their coats, is a point requiring further elucidation. The escape of the blood, in whatever way it occurs, is doubtless favored by the peculiar erectile and vascular apparatus of the uterus and ovaries (which has been so well described by Rouget), which is probably in a state of turgescence during the excitement of the menstrual nisus." After a fair statement of the various theories of menstruation he concludes: "Ova may escape independently of menstruation, but the weight of evidence remains strongly in favor of the generally received theory."

Prominent among the signs of pregnancy he places the intermittent contractions of the uterus, as first pointed out by Dr. B. Hicks. "After the uterus is sufficiently large to be felt by palpitation, if the hand be placed over it and it be grasped for a time without using any friction or pressure, it will be observed to distinctly harden in a manner that is quite characteristic. This intermittent contraction occurs every five or ten minutes, sometimes oftener, rarely at longer intervals. These contractions are constant and normal concomitants of pregnancy, continuing during the whole period of utero-gestation, and forming a ready and reliable means of distinguishing the uterine tumor from other abdominal enlargements. If the hand be kept steady on the uterus, its alternate hardening and relaxation can be appreciated with the greatest ease. The advantage which this sign has over the fœtal movements is that it is constant, that it is not liable to be simulated by anything else, and that it is independent of the life of the child, being equally appreciable when the uterus contains a degenerated ovum or dead fœtus."

After a careful examination of the evidences upon which the estimation of the duration of pregnancy is based, Playfair says that "it is very probable that a considerable but unknown interval occurs between insemination and actual impregnation, which may render calculations as to the precise duration of pregnancy altogether unreliable." Statistical evidence establishes nothing except that delivery may take place somewhere between two hundred and fifty and three hundred days after the last appearance of the menses, the average being two hundred and seventy-eight days. Who shall tell in a particular case the day of delivery with any degree of certainty? Still the practitioner is consulted on this matter, and must make some calculation. The rule adopted by Dr. Mathew Duncan is recommended as being more successful than that of others. It is as follows: "Find the day on which the female ceased to menstruate, or the first day of being what she calls 'well.' Take that day nine months forward as two hundred and seventy-five, unless February is included, in which case it is taken as two hundred and seventy-three days; to this add three days in the former case, or five if February is in the count, to make up two hundred and seventy-eight. This two hundred and seventy-eighth day should then be fixed on as the middle of the week, or, to make the prediction the more accurate, of the fortnight in which the confinement is likely to occur, by which means allowance is made for the average variation of either excess or deficiency."

All writers recognize the peculiar dangers of abortion after the third month, but most fail to make a statement of the reasons therefor so clearly as Playfair. Thus he says: "Up to the end of the third month, when miscarriage occurs the entire ovum is generally cast off *en masse*, the decidua subsequently coming away in shreds, or as an entire membrane. The abortion is then comparatively easy. From the third to the sixth month, after the placenta is formed, the amnion is, as a rule, first ruptured by the uterine contractions and the fœtus expelled by itself. The placenta and its membranes may then be shed as in ordinary labor. It often happens, however, that on account of the firmness of the placental adhesion at this period, the secondaries are retained for a greater or less length of time. This subjects the patients to many risks, especially to those of profuse hemorrhage of septicæmia. Hence the risks to the mother are greater between the third and sixth months of pregnancy than at an earlier or later date."

As to the reason why labor comes on at a fixed epoch, Playfair says, that in spite of the numerous theories on the subject, we are still in entire ignorance. Concerning the mechanism by which the placenta is expelled, he shows that when left to nature the separated placenta is expelled edgewise, its uterine and detached surface gliding along the inner surface of the uterus, the foldings of its structure being parallel to the long diameter of the uterine cavity. In this way little or no hemorrhage occurs, while if removed by pulling on the cord, etc., the placenta obstructs the os, and, acting like a piston, tends to promote hemorrhage. McClintock's rule is endorsed—"that fifteen to twenty minutes should be allowed to elapse after the birth of the child before any attempt to remove the afterbirth is made." As to the mode of effecting the expulsion of the afterbirth he says: "During the above interval the nurse or physician should sit by the bedside, with the hand on the uterus to secure contraction and prevent distention." After this interval "the fundus should be grasped in the hollow of the left hand, the ulnar edge of the hand being well pressed down behind the fundus, and *when the uterus is felt to harden*, strong, firm pressure should be made downwards and backwards in the axis of the pelvic brim. If the maneuvre be properly carried out, and sufficiently firm pressure made, in almost every case the uterus may be made to expel the placenta into the bed, along with any coagula that may be in its cavity." If the first effort be unsuccessful, we may wait until another contraction, and repeat it.

Lack of space prevents a further quotation of points we had marked. Enough has been said to show that the author's aims have been fairly reached, that the book is worthy of its author—a substantial gain to the profession, and especially to the medical student.

A MANUAL OF MIDWIFERY. By Alfred Meadows, M. D., F. R. C. P., etc. Second American from third London edition; revised and enlarged. Cloth; pages, 490. 1876. Philadelphia: Lindsay & Blakiston. Price, $3.25.

This book is, in the best sense of that much-abused term, a "manual" of midwifery. While of necessity less complete than larger works, the subject is presented with sufficient fullness to avoid misconception. Further, the material has been fairly grasped and completely digested by the author, so that his work is a real organic growth different from any or all other works on obstetrics. About one hundred pages are devoted to the "Anatomy and Physiology of the Organs of Gestation;" fifty pages to "Pregnancy;" forty pages to "Natural Parturition;" one hundred pages to

"Obstetric Operations;" seventy pages to "Unnatural Labor;" fifty pages to "Complex Labor;" and the rest of the work to "Puerperal Diseases." The whole is illustrated by about one hundred and fifty wood cuts, none of them specially handsome, but all more or less instructive. To one who cannot afford a larger work, or who has not time to study more than is here written, this little work is especially suited. In so far as it goes it is remarkably concise and correct. In medical schools where the course on obstetrics is short, this book will prove invaluable to both teachers and pupils.

STATISTICS, MEDICAL AND ANTHROPOLOGICAL, OF THE PROVOST-MARSHAL-GENERAL'S BUREAU, derived from the records of the examination for military service in the armies of the United States during the late war of the rebellion, of over a million of recruits, drafted men, substitutes and enrolled men; compiled under the direction of the secretary of war, by J. H. Baxter, A. M., M. D., colonel and chief medical purveyor, U. S. A., late chief medical officer of the provost-marshal-general's bureau. In two volumes of about 600 pages each. 1875. Washington. Government printing office.

The more we examine these volumes the more are we impressed with the wisdom that conceived them, and the patient, persistent labor by which they were issued. For ten years the work grew not into a royal tree or princely temple, but into a book that will outlast both tree and temple.

More than half a million carefully made and exactly recorded examinations of men constitute the basis for this book. These men represent the masses, as found in the United States; they were men engaged in every occupation—the professional man and the man of letters; the trader, the merchant, the clerk, the artisan, and the unskilled laborer; the rich man and the poor man, the robust and the crippled; the native and foreign born; in short, they exhibit the physical aptitude of the nation for war or any enterprise calling for physical powers. From any standpoint, this exhaustive study of over half a million men is of incalculable value to the nation and to all interested in the general study of man. The manner in which the examinations—the records of which form the ground-work of these statistics—were conducted is worthy of note. Surgeons who performed the duty of conducting such examinations will remember their thoroughness. All doubtful or incomplete examinations were rejected by Dr.

Baxter. In various tables and charts certain elementary conditions, obtained from these trustworthy sources, are compared with each other and considered in relation to disease. These elementary conditions are height, girth of chest, expansion of chest, age, weight, complexion, nativity, social condition (married or single), and locality. In order that these reports may be more interesting and more easily comprehended, the results have been given in ratios. Some faint idea of the amount of work necessary to thus elaborate these statistics may be gathered from the following: Thus, of preliminary tables 5,426 were needed, and in these were 5,947,840 sets of figures; of intermediate tables 41 were needed, and in these 1,598,590 sets of figures. The number of ratios deduced was 113,402, and the final tables constructed were 23. In order to make the tables more valuable, charts are given which at a glance exhibit to the eye the most interesting results. The 23 final tables are given in the second volume. Volume one contains the "introduction," "general review of the tables, with their results," the "charts and maps," and the "reports of surgeons of boards of enrollment, and other documents." A copious general index closes the volume. The introduction contains, in addition to a general account of the "plan and scope of the work," a compilation of the "instructions to recruiting surgeons issued by various governments," and an excellent "outline of the history of anthropometry." Of the many special points we had marked for quotation, we have space only for the following:

It is shown that the white native of the United States does not attain his full growth until he is between thirty and thirty-five years of age, a fact of considerable importance, as the age of completed growth is stated very diversely by various authors.

The typical syphilitic man is shown by the charts to be unmarried, of light complexion, twenty to twenty-five years old, five feet three inches to five feet seven inches in height, and a native of a southern country, or possibly of Great Britain, while the typical rheumatic man is married, of dark complexion, over forty years of age, very tall, and a native of a northern country. Of the particular diseases which attack men following certain occupations it was found that lawyers are more subject to chronic rheumatism, diseases of the nervous system (as a whole), disorders of the intellect, and obesity, than the men of any other profession; they suffer more than the average from phthisis pulmonalis, paralysis, diseases of the digestive system, and disease as a whole. Editors are shown to be most of all subject to phthisis pulmonalis, diseases of the circulatory system, and disease as a whole, and more than the average subject to diseases of the digestive system, while they enjoy nearly or quite entire immunity from chronic rheumatism, syphilis, diseases of the nervous system, paralysis, disorders of the intellect and obesity.

A word as to mechanical execution. Rarely does a book come to our office so perfect in every respect as this one. The type setter, proof reader, pressman, deserve high praise for their work. Too great credit cannot be accorded to the real author of these magnificent volumes, Colonel Baxter. Further, as our national government authorized its compilation, and paid for its execution, we are bound to credit it with a service of priceless value to the medical profession and to humanity at large. Our only regret in the matter is that the method of publication and distribution of government publications is such that it is very difficult for genuine students to obtain copies. If instead of placing them in the hands of politicians for distribution to their friends they were placed in the book market at a reasonable price, less expense would accrue to the government, and more genuine students would obtain the books.

THE THEORY AND PRACTICE OF MEDICINE. By Frederick F. Roberts, M. D., B. Sc., M. R. C. P, etc. Second American, from last London edition; revised and enlarged. 1876. Philadelphia: Lindsay & Blakiston. Cloth, $5; sheep, $6.

Some two years since, after a careful examination of the first edition, we gave our opinion that this was a thoroughly good book for medical students, nor have we seen its rival until the second edition was laid upon our table. Plenty of good books on the practice of medicine have been written, but none that fully met the need of the average student so well as this. In our own student days we were more perplexed to know what not to learn than to really learn what we ought. Dr. Roberts has relieved the student from all similar perplexity by rejecting all matter useless to a student and giving only that which must be mastered. The matter of the book has been slightly increased, but by the use of smaller type and larger pages its size is no greater. We observe that less of the finest type is used than in the first edition. The same classification is followed, and the same general course of treating individual diseases and their classes. Thus, under the head of "Diseases of the circulatory organs," we find described in order the clinical phenomena connected with the heart, with the arteries and the veins; the physical examination of the circulatory organs in general, then that of the heart, arteries and veins. Under each heading are numerous subdivisions, giving a capital account of this very important subject. Following this we find an account of the individual diseases of the heart, arteries and veins. A student with ordinary senses and common sense cannot fail to obtain a clear and practical knowledge of these diseases, if he have mastered these chapters. The same general course is pursued in treating other classes of diseases. In comparing the text of this edition with that of the first, we find many chapters rewritten, so as to include the latest views. Some less important diseases have been introduced in order to render the book more complete; some diseases before briefly touched upon are here considered more in detail.

Thus, in short, Dr. Roberts has given us the latest picture of the ever shifting field of practical medicine, one perfectly adapted to the wants of the average medical student; nor can the average practitioner, with little money or time, afford to neglect the aid here offered.

The publishers have done their part with their usual good taste.

THIRTY-THIRD ANNUAL REPORT OF THE MANAGERS OF THE STATE LUNATIC ASYLUM, Utica, N. Y. 1875. Paper; pp. 72.

In addition to the managers' report we find reports from the treasurer, the steward and the superintendent. From the latter we learn that four hundred and thirty-two were admitted to the asylum during the year. The number remaining at the end of the year was six hundred and thirty-five, the males exceeding the females by thirteen. A considerable number of statistical tables give us a great variety of facts respecting the insane. Of the entire number only twenty-six could not read or write, five were college graduates, thirty-nine academic, and three hundred and eleven had a common school education. Of the exciting causes in those admitted during the year, ill health from over work and over worry produced the greatest number.

A significant fact is that housekeepers and house workers contributed by far the greatest number of insane. The history and *post-mortem* examinations of twenty-two cases are recorded. The care and skill exhibited in these render them of great positive value in unraveling the mysteries of insanity. As we read these and thought of the rare chances for study in these vast hospitals, we could not but regret that our own State did not see fit to appoint, on liberal salary, a scientific investigator to utilize the material that is annually wasted at our own magnificent asylum.

TRANSACTIONS OF THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND. 1876. Paper; pp. 167.

This volume is divided into the minutes of the meeting, reports of various officers and business committees, the annual oration, reports from the sections on surgery, ophthalmology, practice of medicine, obstetrics and gynæcology, psychology and physiology, and various articles, viz: "An analysis of a few cases of abdominal diseases," by W. C. Van Bibbes; "Case of empyema cured by thoracentesis," by L. E. Gibbons; "Tumor of the testicle," by C. Johnston; "Successful treatment of some forms of peripheral paralysis," by J. Van Bibbes; "Thirty-seven operations of thoracentesis by pneumatic aspiration," by Frank Donaldson.

In the annual oration on "the degree of certainty in therapeutics," Dr. Barthelow says: "In the present state of our knowledge, that practitioner is reprehensible who can see in digitalis, aconite and veratrum viride, only anti-pyretic remedies, and cannot indicate the limits and range of their action. It is now conceded on all sides that digitalis lessens the number but increases the energy of the cardiac pulsations and raises the arterial tension. It diminishes abnormal heat, but it only indirectly hinders the migration of the white blood corpuscles by increasing the tonicity of the walls of the vessels. Aconite induces cardiac paralysis, lessens arterial tension and diminishes pyrexia, but it does not affect the calibre of the arterioles. These two agents agree only in their power to reduce the body heat. Both limit the blood supply to the tissues—one by raising the tension in the peripheral vessels and slowing the heart, the other by lowering the activity of the systemic circulation. As respects the mechanism by which the reduction of heat is procured, digitalis and aconite are opposed in their actions, and are consequently applicable to different states of the systemic circulation in pyrexia. Aconite and veratrum viride are more nearly in accord than digitalis and aconite. Veratrum viride is a cardiac paralyzer, affecting both the cardiac muscle and its contained ganglia, and it is also a paralyzer of the vaso-motor nervous system, whence general vaso-motor paresis and fall of the blood pressure are induced by it. By physiological researches we are thus furnished most exact indications for the use of these antipyreties." In closing his address, Dr. Bartholow remarks, "Unbelief in medicines is a crime in those who pretend to be physicians. To deal out drugs without confidence in their utility is to practice a fraud on our patients, is an offense against humanity, and a continual degradation of our moral sense."

The report of sections and the original articles are of greater than usual interest, and reflect credit upon the society.

THE fourth issue of Seiler's micro-photographs in histology is before us. It contains plates of "hepatic cells" from liver of the fly, "leukæmia of the liver," "blood corpuscles" of man and of the ox, and "fat cells" from mesentery of a cat. These are finely executed, and with the explanations are very instructive.

BOOKS, ETC., RECEIVED.

Pathology and Treatment of Childbed; Winckel. Carter on the Eye; Amer. Ed. Lectures on Fever; Stokes. Non-emetic use of ipecacuanha; Woodhull. Yellow Fever; Dowell. Michigan State Board of Agriculture. Transactions of the Medical Association of Missouri, 1875. Manual of Percussion; Flint. Vaccination as a Preventive of Small-pox; Chapman. Public Health Questions; Toner. And a large number of reports from various sources. All will be noticed as we have space.

DETROIT
REVIEW OF MEDICINE
AND PHARMACY.

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Original Communications.

MATERNAL IMPRESSIONS.

Report of the Obstetric Section of the Toledo Medical Association. By Thomas Waddel, M. D.

MR. PRESIDENT AND GENTLEMEN—Your committee, to which the subject of maternal impressions was referred, desire to state as preface to their report, that the question is one which cannot be decided by superficial or hasty examination, involving, as it does, the whole subject of normal as well as abnormal embryonic development, with its general physiology and fact. Besides, it is a question on which authorities are not all agreed, and characterized by a dearth of scientific literature accessible to the English student. If we except the able monograph of Dr. Fisher, on the Genesis of Double Monsters,* no distinct scientific treatise exists in the English language. A few articles in medical journals and reports of societies, with appended cases illustrating some single part of the subject, constitute the bulk of the literature.

Indeed, it has been strongly impressed upon your committee, that to this scantiness of the literature might be largely attributed the want of unity of opinion among the profession. In view of the extent of the question at issue, it has seemed proper :

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*Transactions of the Medical Society of the State of New York.

First, To examine the anatomical and physiological relations of the mother to the embryo.

Second, To consider the facts and circumstances which seem to show that the mother's mind has such power over the fœtus in utero as to change its conformation or cause deformity.

Third, To examine such evidence in the light of modern embryonic physiology and pathological anatomy. In doing this it may be necessary in places to apparently step beyond the pale of the subject proper, but remembering that a just appreciation of the question can only be gained by an examination from all available points, we trust to being excused for such apparent digression.

PHYSIOLOGY AND ANATOMY.

It will be remembered that as soon as fecundation of the ovum has taken place, either on the ovary or in the fallopian tube, the uterus prepares a nest for its reception by a hyperplastic development of its lining membrane. When the impregnated ovum reaches the uterus, it falls from the opening of the fallopian tube into a fold or reduplication of the mucous membrane, and soon becomes attached there, and encapsuled by the membrane rising up on all sides and completely enclosing it, thus forming the decidua reflexa (Whittaker). As early as the second week the villi of the chorion are formed, their office being the absorption of the "uterine milk," which is secreted by the maternal cells for the nourishment of the embryo. These villosities of the chorion do not, as "was formerly supposed, penetrate the glandular ostia, and enter the ducts of the glands themselves, thus forming a comparitively firm connection between the ovum and surrounding uterine membranes, but the villi of the chorion are forced, as it were, into the tissue of the reflexa, and are enveloped by it."—*Engleman, on the Mucous Membrane of the Uterus.*

For the first month of pregnancy the attachment between the outer membrane of the ovum (chorion) and its enveloping membranes of the uterus is so slight, "that unless the greatest care is taken, the simple handling of the organ will liberate it," and it is only as late as the third month, when the chorion villi have become developed and enfolded by the decidua serotina, that agglutination of the chorion and decidua finally obtains. About the middle of the third month, two-thirds of the chorion villi have become atrophied, and the remaining third becoming hypertrophied, are forming the fœtal placenta.

We have seen that the embryo has up to this time been sustained by nutritious material furnished by the uterine glands, and absorbed by the chorion villi. This simple means of nutrition now becomes insufficient, and provision is made for a more elaborate supply. This is accomplished by part of the chorion villi becoming enormously enlarged and developed into the fœtal portion of the placenta, and being enfolded by the corresponding portion of the membrane of the uterus, bathe constantly in a stream of blood in the sinuses of the maternal placenta.

No interchange of blood occurs at any time between the fœtus and the mother. "The vessels of the mother never anastomose, nor do they come in immediate contact with those of the fœtal placenta" (Ercoloni), only the materials necessary for fœtal existence being imbibed and excrementitious material discharged through the membrane forming the walls of the villi.

Some authorities, as Ercolani (*Memoir on the Utricular Glands of the Uterus*), assert that even this interchange is not a simple osmotic process, but that the outer walls of the villi are composed of secreting cells, which abstract from the blood by which it is bathed the nutrient materials (uterine milk) which nourish the fœtus.

"No nerves or lymphatics exist in either portion of the placenta. The cord contains no nerves, no capillaries, not even vasa vasorum, and no lymphatics."—*Whittaker, Morbid Anatomy of the Placenta.*

Simpson says: "Nor has any anatomist ever traced the passage of any nervous branches from the applied surface of the uterus, nor have any nutrient arteries been as yet at least shown to pass from the uterus into the maternal substance of the placenta."—*Type of Structure of the Placenta.*

Says Meadows: "All attempts to discover any nervous connection between the fœtus and the mother have hitherto entirely failed. No one has yet ventured to affirm the existence of nerve structure in the umbilical cord, nor has a trace been discovered in the placenta itself."—*Manual of Midwifery.*

The evidence of maternal impressions being conveyed to the fœtus in utero and causing its deformity is found in cases reported, such as the following, the first two from Dr. William Hammond:

"A lady in the third month of pregnancy was very much horrified by her husband being brought home one evening with a severe wound of the face, from which the blood was streaming. The shock to her was so great that she fainted and subsequently had an hysterical attack, during which she was under my care. Soon after her recovery she told me that she was afraid her child would be afflicted in some way, and even then could not get rid of the impression the sight of her husband's bloody face had made on her. In due time the child, a girl, was born. She had a dark, red mark upon her face, corresponding in situation and extent with that which had been upon her father's face. She proved, also, to be idiotic."

The wife of the janitor of the College of Physicians and Surgeons, during her pregnancy, dreamed that she saw a man who had lost a part of the external ear. The dream made a great impression on her mind, and she mentioned it to her husband. When her child was born, a portion of one ear was deficient, and the organ was exactly like the defective ear she had seen in her dream. * * * I have examined this child, and the ear looks as if a portion had been cut off with a sharp knife.—***William A.*** *Hammond, in the Psychological Journal, Vol. 2, 1868.*

At a meeting of the Philadelphia Obstetrical Society, the following cases were reported as well authenticated:

Dr. Ludlow said that in one case the mother daily passed a child whose limbs were bandaged for white swelling. Her child was born with every limb dislocated. Another mother was frightened by a hidious face; her child was born with a hare lip. In another case the mother placed her hand on her face on the occasion of a fire. The child was born with a red fire mark on the face.

Dr. Taylor had seen a case in a child whose right hand was without fingers. The mother accounted for it by the fact that early in gestation a beggar asked her for alms, at the same time thrusting out a mutilated hand. Dr. Stewart had a case where the mother asked immediately whether the child was well formed about the hand; each had a supernumerary finger. The mother had been impressed by seeing a man pass the house with those supernumerary fingers."—*American Journal of Obstetrics, Vol. 6, p. 641.*

A woman between four and five months advanced in pregnancy had an insatiable desire for a fine salmon which she saw in the market. This she purchased despite her poverty, and as a result, at the end of the full term of normal gestation, she was delivered of a child, the head and body of which presented a peculiar and strange conformation; in truth, it was salmon-shaped; while the fingers and toes were webbed, representing the fins and tail of a salmon.—*Dr. Horsefield, Fellow of the New York Academy of Medicine. Dr. Orilley quoted by Fisher.*

Prof. Carnochan, of New York, wrote to Dr. Orilley, in 1864, giving him an account of two cases of hare lip, which he says "I have no doubt occurred from maternal impressions conveyed to the fœtus"—one, he states, caused by a dentist, who roughly lifted the mother's upper lip at the sixth month of pregnancy; the other by a female, then pregnant eight weeks, seeing two girls suddenly enter a room, who had each been imperfectly relieved by surgery for this deformity. Prof. C. adds: "I could proceed enumerating cases of a similar character proving, as I believe, the positive influence of maternal impressions upon the fœtus *in utero.*"

The author from whom the first two cases are quoted is an able and earnest advocate of the affirmative side of this question. Hence we believe they present as good evidence as circumstances can well furnish. Referring to the first, Dr. Hammond says: "This case, which occurred in my own experience, scarcely admits of doubt as to the influence of the maternal mind over the physical structure of the fœtus." And again: "The chances of these instances and others which I have mentioned being due to coincidence are infinitesimally small, and though I am careful not to reason *post hoc*, I cannot, nor do I think any other person can, no matter how logical may be his mind, reason fairly against the connection between cause and effect in such cases. The correctness of the facts can only be questioned; if these be accepted, the probabilities are thousands of millions to one that the relations between the phenomena are direct." The means by which such effects are produced he assumes to be the blood, which in some way carries the influence of the existing condition of the mother to the fœtus by the interchange of the circulation. He considers it to be analogous to the phenomena by which fear, passion and anger have been known (?) to cause the nursing mother's milk to become suddenly fatal to the child.

Dr. Dalton says: "It is through the medium of the placental circulation that those disturbing effects are produced on the nutrition of the fœtus which result from sudden shocks or injuries inflicted upon the mother. There is now little room for doubt that various deformities and deficiencies of the fœtus, conformably to the popular belief, do really originate, in certain cases, from nervous impressions, such as disgust, fear or anger, experienced by the mother. The mode in which these effects may be produced is readily understood from what has been said above on the anatomy and functions of the placenta.

"We know very well how easily nervous impressions will disturb the circulation in the brain, the face, the lungs, etc., and the uterine circulation is quite as easily influenced by similar causes, as physicians see every day in cases of amenorrhea, menorrhagia, etc. If a nervous shock may excite premature contraction in the muscular fibres of the pregnant uterus, and produce abortion, as not unfrequently happens, it is certainly capable of disturbing the course of the circulation through the same organ.

"But the fœtal circulation is dependent, to a great extent, on the maternal, since the two sets of vessels are so closely entwined in the placenta, and since the fœtal blood has much the same relation to the maternal that the blood in the pulmonary capillaries has to the air vesicles, it will be liable to derangement for similar causes. * * * Whatever arrests or disturbs the circulation through the vessels of the maternal uterus must necessarily be liable to interfere with that in the fœtal capillaries forming part of the placenta. And lastly, as the nutrition of the fœtus is provided for wholly by the placenta, it will, of course, suffer immediately from any such disturbance of the placental circulation. These effects may be manifested either in the general atrophy and death of the fœtus, or, if the disturbing cause is slight, in the atrophy or imperfect development of particular parts; just as in the adult a morbid cause, operating through the entire system, may be first, or even exclusively, manifested in some particular organ which is more sensitive to its influence than other parts."—*Human Physiology, 4th edition, page 617.*

Says Dr. Seguin: "Impressions will sometimes reach the fœtus in its recess, cut off its legs or arms, or inflict large flesh wounds, before birth—inexplicable as well as indisputable facts."—*Idiocy and Its Treatment.*

Your committee would not consider it proper to accept these histories and statements as conclusive, but desire to examine them in the light of demonstrated modern physiological truth. Hence the necessity of reviewing at some length some of the proved facts pertaining to embryonic development.

From the earliest periods of history until the present, the possibility of the mother's mind impressing the fœtus *in utero* was a settled belief of the laity of all classes. As an example of how deeply rooted are such convictions, it is well known that during the past thirty years the French government refused to grant permission to exhibit living double monstrosities within the empire, for fear that pregnant women beholding them would bring forth similar abnormalities.

Nor is this belief confined alone to the laity, for medical men from the time of Hippocrates, five centuries before Christ, to that of Ambrose Pare, in the eighteenth century, A. D., had full faith in the power of the mother's mind to produce deformity of the fœtus.

We cannot wonder at this when we consider that embryology as a science hardly existed up to the middle of the eighteenth century, and consequently no advances had been made looking to their etiology on an anatomical and embryological basis—the only method by which the relations of abnormal to normal development can be profitably studied.

Although Morgagni and his cotemporaries had corrected many erroneous doctrines, and proposed more rational explanations regarding the nature and origin of abnormal formations, the distinguished honor of elevating the subject to a science is due to the genius of Albrecht Von Haller, who expunged from its literature the superstitious ideas and non-authenticated cases which were relics of the fabulous period from which it had only emerged.

In this condition it remained to the time of Bichat, who, says Dr. Fisher, was the founder of philosophical and analytical anatomy. "The maturely and normally developed human body was compared with the embryo. The various species of organized beings and their embryo were compared with man, and as a result, we became acquainted, on the one hand, with the ultimate structure, composition and science of the human body, and, on the other, with the general facts, plan and unity of animal organization, including all its multiform genera and species in every age. On these comprehensive views a new theory of anomalies and monstrosities was founded, viz: that of arrest and retardation of development, which is now found to explain many varieties of monstrosities, but more particularly those which should be regarded as vices of conformation, as, for example, cleft formations, deficiencies, absence of parts, etc. By a careful study of the laws of development, and the order in which the various organs are evolved in the embryo, it has been observed that monsters by defect or arrest of development are, to a certain extent, permanent embryos. The abnormal organs merely represent the primitive condition of formation as it existed at an early stage of embryonic or fœtal life.—*An essay on Compound Human Monsters—Trans. New York State Medical Society, 1865, p. 248.*

ARREST OF DEVELOPMENT.

This class of malformations is so common, and one of so much importance in the study of this subject, that we have thought proper to append the following cases, with a view to illustrating their etiology:

Case of Dr. Roberts.—Child a female, seventh month; acephalous; the entire scalp, the integuments over the spinal column, with the lamina and spinous processes of the cervical and dorsal vertebra, were wanting; abdominal parietes also wanting, exposing the liver in situ, covered only by peritoneum; several coils of intestine extruded.—*Trans. Obstetrical Society of London, 1869.*

Case of Dr. Gretchell.—Mother aged nineteen; first birth; child born alive, lived half an hour; "besides having club feet and spina bifida, it had all the abdominal organs outside the abdomen, covered only by serous membrane. There was neither anus nor genital organs. The mother could assign no cause; she expected a healthy child."

Case of Dr. May.—Subject was aged twenty-eight; had exstrophy of the bladder; tumor large as two fists; orifices of ureters visible; penis short, flattened and imperforate; no signs of an umbilicus or previous attachment of fœtal cord; perfectly deaf in one ear; had six toes on each foot; is second of a family of nine children; the fifth had a small toe hanging from his great toe."—*Am. Jour. Med. Sciences, July, 1869.*

To properly consider these, as well as all similar cases, it is necessary for us to refer to the normal development of the embryo. The dorsal plates, which afterwards form the spinal column, are developed on the surface of the external blastodermic membrane as two elevated ridges enclosing a furrow. These ridges, gradually rising and approaching each other, unite to form the spinal column. If, from failure of the formative force, these plates do not develop sufficiently to unite and close the canal, spina bifida is the result.

In the same manner the abdominal plates, arising from these dorsal plates, by extending outwards and forwards meet together at the umbilicus, and thus form the parietes of the abdomen. Arrest of development affecting these plates does not necessarily interfere with the evolution of the abdominal viscera, hence the liver, spleen, kidneys, bladder and alimentary canal often attain their normal development and position, but from failure of development of the abdominal plates, they remain uncovered save by peritoneum. The resulting deformity is not infrequently attributed to the mothers having contemplated the specimens of butcher shops, when in reality it often has its origin in purely local causes, such as adhesions of the amnion or "shortness of the penis and deficient union of the vessels forming into one common cord."—*Vogel.*

The arrested development of the maxillary processes causes hare lip. The bony structures may unite, leaving the soft parts separated (simple hare lip), or arrested development of the entire structures may obtain (cleft palate—complicated hare lip). Acephalous fœtus, a very common form of malformation, is now known to result from embryonic hydrocephalus, the cerebral vesicles becoming distended until rupture takes place. The sides and vault of the cranium, as well as the cerebral matter, are consequently not formed.

But what is most interesting in this connection is the fact pointed out by Dr. Burtell, viz: "That in whatever way a simple hare lip has been formed, it seems to be still capable of secondary cicatrization *in utero.* The proximal edges of the hare lip being in contact, the epithelium may give way, and the two raw surfaces unite by cicatrization."

Another point to which we would call particular attention is, that "if the emotions of the mother ever affect the fœtus so as to induce deformity, this must be done at or before the precise time at which the deformed part is undergoing evolution." Thus we well know that as early as the third month the hands and feet are formed, and by the fourteenth week the abdominal plates have united at the umbilicus; the genital organs are distinct, and the maxillary processes, with their soft parts, have united, forming the upper lip. And yet in one of the cases of hare lip of Prof. Carnochan, previously quoted, the deformity is gravely attributed to a dentist roughly handling the mother's lip *during the sixth month of pregnancy,* which would necessitate, not a power to arrest development, but a power to actually destroy parts already developed.

In like manner, it is not uncommon for cases of exstrophy of the bladder, ectopia viscera, etc., to be cited as examples of some impression made on the mother's mind as late as the fourth, fifth or even the sixth month, when, in fact, it is now positively determined that the causes of this deformity, viz: adhesions of the allantois to the chorion, must be operative as early as the fourth week.—*Mr. John Wood, Half-Yearly Abstract, July 1869.*

It is an interesting fact connected with arrested development that this tendency frequently descends through generations. Thus, of eleven cases of hare lip quoted by Dr. Fisher, two were hereditary. In the one case three children of one family, and in the other two maternal uncles, had a like deformity. Dr. Gordon Buck saw a woman in his clinic at St. Luke's Hospital who was the mother of seven healthy children, six of whom had hare lip. The mother, as well as her brother and sister, were similarly deformed.—*Medical Record, vol. 6, p. 505.*

Dr. Pooly reports the case of a little girl ten years of age, who had deficiency of both upper extremities; thumbs of each hand, with the corresponding carpal bones, absent; both forearms abnormally shortened, with total absence of the radius of the left; ears small and abnormally shaped; slightly deaf; child very bright and intelligent, but has well marked phthisis. The mother has a similar deformity; she is also a victim of phthisis. Had another child similarly deformed; had two other children which were normal in every way. It might be mentioned, in this connection, that the grandmother of this little girl attributes the deformity of the mother to "fright while pregnant from some crabs crawling on the kitchen floor." She also attributes the deformity of the grandchildren to a fright which the mother received while pregnant.—*Am. Jour. Med. Sciences, Oct., 1867, p. 410.*

Case of Dr. John Harker.—The boy's fingers were webbed to the tips, the little finger having an extra nail, "each member thus forming a prehensile paw." The child's father and grandfather had similar hands. The child is very active and intelligent. The little toe of the right foot is webbed to the next toe; some (not all) of the brothers and sisters had similar hands.—*Lancet, 1866.*

Among the causes of arrested development which deserve prominent mention, stand great constitutional debility, or inherent diathesis of either or both parents. The operation of these causes are well illustrated by the following cases:

Case of Dr. Michael.—The mother's father had a very nervous temperament, she herself having chorea from infancy, periodically. She had seven miscarriages in succession at periods more and more advanced. Those children were well formed. The eighth child, a female, she carried to full term. It was beautifully formed in every way, but was found totally blind from congenital amaurosis. The reporter says: "Here the super-excitation of the nervous system of the mother produced no effect whatever on the development of the child, whose eyes were well formed, but the nervous disease with which the parent suffered presented itself in the offspring in the modified form of retinal insensibility.—*Amer. Jour. Med. Sciences.*

Case of Dr. Parish.—Father aged forty-five; in the last stages of consumption; mother had six children, all healthy. She herself is feeble, but not diseased. The abdomen was large; an unusually large quantity of liquor amnii escaped. The child was well developed in all parts except the head; the bony structures of the cranial vault were absent.—*Am. Jour. of Obstetrics, vol. 8, p. 546.*

While engaged in the preparation of this report, the following interesting case, showing the influence of diathesis, came under the observation of your committee: Father aged twenty-three; mother aged twenty; both healthy; first birth; child presented by the breach, yet labor was easy. On examination, the child was found to have double talipes varus, the right foot being badly deformed, the left less so. The sacrum was bifid, the projecting tumor only moderately large, and partially covered by integument, the remaining covering being the attenuated membrane of the cord. On casual inquiry, no evidence of immediate congenital deformity in either branch of the family could be elicited, but on directing attention of the parents to that point, the following pathological history was brought to light: One paternal uncle on grandmother's side had double club feet; one paternal aunt, herself healthy, gave birth to two children with hare lip; one paternal niece died from non-congenital kyphosis; another paternal niece was born with deficiency of the cranial vault; the grandfather had, at the time of his death, a small tumor on his spine, caused by a slight injury.

Sir James Y. Simpson described, in 1838, intra-uterine peritonitis as a "most common form of fœtal disease," and reported nine cases occurring in his practice during twenty-two months. He found the disease in one case as early as the fourth month. Having so frequently observed patches of coagulable lymph on the surface of the peritoneum in cases of monstrosity, characterized by extroversion of the viscera, he was led to believe that the occurrence of peritonitis and other inflammations affecting the embryo at a very early period, was a common cause of malformations.—*Obstet. and Gynæcology, p. 119.*

Bronchocele, another disease affecting the fœtus *in utero,* sometimes causes marked deformity, as instance the specimen presented to this association by Dr. Reid, in which, from the pressure of the tumor, the head was thrown backwards (probably as early as the sixth week of intra-uterine life). The occiput resting against the spinal column, union obtained, and a direct opening from the posterior occipital region to the dorsal region of the spinal canal.

An interesting fact bearing on this subject of intra-uterine fœtal disease as causative of congenital deformities, has been presented by Dr. St. John Roosa: From a careful examination of the membranum tympani, throat and fauces of two hundred and sixty-nine deaf mutes, he found in one hundred and eleven of the one hundred and eighteen cases classified as congenital, a pharyngites and tonsillitis. From the constant occurrence of this complication, and the well known intimate connection between the faucial mucous membrane and the middle ear, he reaches the conclusion that "by far the greater number of cases of congenital deaf mutism, as here observed, *had their origin in inflammation of the middle ear occurring in intra-uterine life."—Am. Jour. Medical Sciences, April, 1867.*

So much for arrested development and its causes. But "the process of evolution may be excessive, as well as incomplete. When excessive in certain portions of the capillaries, these blood vessels, which are, in the normal state, too small to be seen by the naked eye, now become so large as to carry red blood, and to impart to the locality (if in the skin) a corresponding degree of redness. This is the way marks are formed. An excess of evolution may also produce supernumerary fingers or other appendages."—*Dugas, quoted by Fisher.*

It is this excessive development of blood vessels which are constantly pointed out as marks of fruits, etc., for which the mother longed, or the representation of some animal or object which frightened her during pregnancy.

Dr. Detmold, during a discussion before the New York Academy of Medicine upon this subject, remarked: "I suppose there is hardly a surgeon who has not seen a large number of cases where deformities have been attributed to influences of the same kind. I allude to those red spots—those aneurisms by anastomoses—which are attributed by the mothers of the children to this and to that cause. I recollect fifteen years ago I was called on by a distinguished obstetrician to perform an operation on a child's cheek. He told me that the mother had been frightened by a leech, and that of course the child had a leech on the cheek. It was simply an aneurism by anastomoses, with as much resemblance to a leech as to an elephant."—*Bulletin N. Y. Academy of Medicine, vol. 1, p. 364.*

A fact in connection with this class of deformities (moles, nevi, supernumerary fingers and toes, etc.) has been frequently attested, viz: that they are, in common with family resemblances, most frequently transmitted through generations.

INTRA-UTERINE AMPUTATIONS.

Few congenital deformities found affecting the fœtus are so often pointed out as the result of maternal impressions as deficiency of limbs or intra-uterine amputations. For a noted example of this, we have only to refer to the remark of Dr. Seguin, before quoted, viz: "that such impressions will reach the fœtus in its recess, cut off its arms or legs," and he boldly asserts them as "inexplicable as well as indisputable facts."

Your committee believe that nearly if not all of the varieties of this deformity can be positively shown to depend on disease of the membranes enclosing the fœtus or its appendages.

Dr. Montgomery, in his admirable essay on spontaneous amputation, first showed the possibility of these amputations being due to amniotic bands, and reported a series of twenty-eight cases illustrating nearly all the varieties of this deformity. He believed that in most of these cases inflammatory action obtains in the membranes, resulting in adhesions to the skin of the fœtus by means of organized lymph.

Schreder concurs in this opinion, and believes that delay in the secretion of the liquor amnii predisposes to the formation of such adhesions.

Prof. Gurlt explains their *modus operandi* by supposing that the liquor when secreted separates the fœtus and the membranes. The struggles of the fœtus, together with the contraction of the organized lymph, increases the pressure on the parts encircled by the bands, and results in amputation.

Courty says: "The pseudo membranes found on the internal surface of and firmly adherent to the amnion, are probable traces of a peculiar inflammation of the amnios. When these phenomena occur early, the amniotic fluid may be absorbed and adhesions established between the integument of the fœtus and the membranes, and these adhesions become in time the cause of various monstrosities."—*Whittaker, Morbid Anatomy of the Placenta.*

The result of these adhesions have been shown to be materially modified according to the period of intra-uterine life when applied. Thus, according to Dr. McCann, if applied early in fœtal life, you will find the limb most probably wholly amputated and the stump quite healed. If somewhat later, you may still find the limb amputated, but the stump will present a small portion of its surface still unhealed, which is always found to be the end of the bones. If the ligature be applied still later, you may find nothing but a furrow or indention of the limb.—*Obstetrical Journal Great Britain and Ireland, February, 1875.*

Again, if amputation occurs early, there is every reason to believe that the amputated limb may be absorbed, for in cases occurring towards the last of pregnancy, the limb is most generally found enclosed in the membranes, whereas, the limb can rarely, if ever, be found in those cases of early amputations. Facts prove conclusively that in those latter cases not only the limb but also the false bands which caused the amputation may be completely absorbed, so that a careful examination of the secundines at the time of normal delivery may fail to reveal the causes of the deformity.

Your committee have not accepted these doctrines without, as seems to them, good reasons for their faith. Accordingly they have subjoined a few cases illustrating this point:

Case of Dr. Kidd.—"Child born in the Comb Lying-in Hospital. One leg was amputated midway between the ankle and the knee. I was not present at the birth, but when I paid my morning visit, succeeded in getting the membranes, and searching carefully in them found the amputated extremity. The other leg was partially amputated, and there was no evidence how the amputation had taken place. In the one hand a fine band passed from the top of the index finger, partially enclosing the middle finger, and attached it to the ring finger. It had nearly cut off the top of the middle finger, and some of the fingers of the other hand had the same kind of bands attached to them."—*Obstetrical Journal Great Britain and Ireland, Vol. 2, p. 737.*

In the remarks made on this case before the Obstetrical Society of Dublin, Dr. Kidd stated that "there was two months difference in development between the child and the foot; the former was full nine months."

Case of Dr. Jacobi.—"A full grown child, born at term; both hands are flexed. On the right side the thumb portions of the carpus and the radius are absent. The forearm is unusually short. On the left side the fingers are adherent, and the third and fourth phalanges of the second and third fingers are constricted and almost amputated. On the left leg there is a sharp constriction of the calf, about half way between the knee and the ankle. Several toes on both feet are adherent, and on the right foot the third toe is strongly constricted by a band going from the second to the fourth toe. All these bands are of amniotic origin." —*American Journal of Obstetrics, Vol. 7, p. 147.*

At a meeting of the Obstetrical Society of New York, Dr. Paul Munde stated that "he had seen a case of partial spontaneous amputation of the metacarpus and first phalanx of the second and third fingers, in which the cause of the amputation was an amniotic band, as proved by the presence of a portion of the constricting band in the palm of the hand in a line directly continuous with the furrow on the sides and back of the hand."—*American Journal Obstetrics, Vol. 8, p. 644.*

Dr. O. Mason exhibited to the Obstetrical Society of New York a fœtal thumb, and gave the following history: "At the birth of the child he noticed that the thumb was very large from œdema, and that it was attached at the metacarpo-phalangeal articulation by a mere thread of skin."

These cases, your committee think, clearly establish the fact that these bands are frequently the cause of the amputation.

The most frequent site for the occurrence of such adhesions is undoubtedly that portion of the amniotic membrane reflected over the placenta and cord. This might be inferred for various anatomical and physiological reasons. During the evolution of the cavity of the amnion and closure of the abdominal plates, conditions exist which may, under slight influences, result in the most grievous deformities. The following cases quoted from Whittaker are not without interest in this connection:

Case of Montgomery.—"Breach presentation; body expelled to the axilla and then immovable; after a while a violent pain expelled the body, head and secundines in toto. The cause of the resistance was now manifest; from the upper part of the funis umbilicalis, the circulation of which was not at all impeded, passed a very strong band about one and a half inches long, with its end firmly attached to the surface of the placenta. This band was perforated, and in the aperture the arm was grasped so tightly just below the elbow that the soft parts were drawn in as if by gradual impression, and covered by skin were divided down to the bone."

Another instance is given of total absence of the entire right lower extremity and part of the pelvis, with cohesion of the placenta with the body of the child at the perineal region, where it still remained adherent.

Braun exhibited two specimens from the Vienna Lying-in Hospital. In the one case the amnion was firmly adherent to the dura-mater. False bands from the placenta had amputated three fingers of the right hand; the toes were united. In the other the placenta was attached to the umbilicus, which the process of expulsion tore open, exposing the abdominal contents.

In 1856, M. Rayer presented to the Society of Biology, of Paris, a hyperencephalic monster, with adhesion of the placenta to the cerebral envelopes.

Carpenteair mentions other almost similar cases in the Museum Dupuytren, at Paris. According to Houel, the placenta adheres to the fœtus in but two parts of its surface, viz., the vault of the cranium and the abdomen; there exists in either case a hernia of the viscera.

He also states that hernia of the brain or absence of that organ, with adhesions of its envelopes to the placenta, seems to be due to shortness of the cord, which he considers primitive.—*Whittaker, Morbid Anatomy of the Placenta—Am. Obstet. Jou* .

Even the umbilical cord may, by becoming entwined about certain portions of the fœtus, cause amputations, deformity or death. Whittaker, in his admirable essay, quoted above, says: "That the cord when entwined about the limbs of a child may amputate the limb, is a fact with which we have long been made acquainted by Montgomery, who has reported a number of interesting cases."

Schwabe has also reported a case of amputation of the leg of an embryo of three months, just above the ankle joint. * * * * "Braun thinks this impossible," but "Klob pertinently remarks that it is questionable whether even the pulsations of the cord itself might not be sufficient to divide the delicate structures of an embryo at this period."

At a meeting of the Obstetrical Society of Philadelphia, October 2d, 1873, Dr. Ingraham exhibited a fœtus of four and a half months with the cord wound once around the thigh, making a deep groove in the integument. Had the fœtus lived to maturity it would undoubtedly have been born with a congenital deficiency of the right leg.—*Am. Jour. of Obstetrics, vol. 7, p. 160.*

The following interesting case occurred in the practice of Dr. Chapman, of this city, to whom we are indebted for its report: Mrs. D. was taken in labor prematurely (seventh month), and after twenty-four hours, was delivered of a dead fœtus, which was immediately followed by a living one of about seven months development. In examining the children, the one born dead was found much smaller than the other, development having ceased some time previously, while in the case of the living fœtus development had been uninterrupted.

"On examination for cause of death, it was discovered that the cord had been wrapped round one limb of the child twice, once around the leg and once around the thigh. The leg and thigh were nearly severed from the body, the bone being the only portion undivided."

Your committee have thought proper to dwell at this length on these demonstrable causes of deformity, believing that they have an important bearing on the question at issue, for unless we can find that the impressions of the mother's mind do in some way bring about these pathological states just alluded to, we must reasonably exclude their influence in the causation of a large class of deformities, such as intra-uterine amputations, some cases of arrested development, distortion of limbs, talipes, hernia of the abdominal viscera, etc.

Regarding the real cause of amniotic bands, enough has been observed to lead strongly to the belief that certain diseases of the uterus or its membranes, or traumatic influences, may in most cases sufficiently account for their production.

We have only time, in passing, to call attention to the great field open for fruitful research, in certain departments of uterine pathology in its relations to this question. Particularly is this so as regards the influences of inflammation existing previous to conception. This subject, which is now attracting the attention of pathologists to its influence in causing abortion and morbid conditions of the placenta and membranes, cannot but yield rich returns when investigated with reference to the pathology of fœtal life.

The remarks of Dr. Robert Barnes, when speaking of placental adhesions, would probably be equally pertinent if applied to this subject. He says: "That in true placental adhesions there is organic change of structure, or abnormal deposit in the decidual portion of that organ, beginning, in all probability, in the mucous membrane before pregnancy. * * * The maternal origin of the forms of diseased placenta leading to adhesion is proved often by the history of previous endometritis or other disease, and by the frequent recurrence of adherent placenta in successive pregnancies."—*Obstetric Operations.*

Braun "finds a cause of hydrometra gravidi uteri in the fluid poured out by this inflammatory process, or by an existing endometritis serosa."—*Whittaker.*

The two following cases are interesting, as tending to add force to the foregoing remarks. The first, reported by Dr. Kidd, of Dublin, is confirmatory of the influence of inflammatory disease of the uterus in causing deformity of the fœtus:

"A woman who was a considerable time in the hospital as a patient, during pregnancy, for chronic inflammatory tumor in connection with the uterus—a localized peritonitis. After she recovered and left the hospital she came back for her confinement. *Her child had two arms amputated and one leg.*"—*Obstet. Jour. Great Britain and Ireland, vol. 2, p. 728.*

The second case, reported by Dr. Charles Leale, shows the influence of an injury to the mother's abdomen, the traumatism producing disease of the fœtus, which, in turn, reacting on structures not intimately connected with the seat of disease, may produce grave deformity of distant organs.

Mrs. A., a very healthy woman; age, thirty-three; had four previous labors, in which the children were perfect. Had good health with this child until the seventh month. About this time she received a severe contusion on the abdomen, from which she fainted, and had to be carried to her home. From this time forward the movements of the fœtus were much less vigorous. She was delivered at full term of a male of eight and one-half pounds, which lived one hour. Post mortem revealed meningeal apoplexy, and, as a consequence, general paralysis, talipes calcaneus of both feet, dislocation of both hands and feet existing at birth.—*Amer. Jour. Med. Sciences, July, 1870.*

DOUBLE MONSTERS AND TWINS.

We would next call attention to the laws governing the development of so-called double monsters, and their relations to twins.

It is a fact now determined by repeated observation, that when twins have a common chorion, there is always unity of sex. Also, that where twins have a common placenta or anastomoses of the placental vessels, there is always unity of sex. With regard to this point Dr. Whittaker says: "The reason that two chorions are present in some cases and but one in others is referred to the origin of the ova. If both ova are from different graäfian follicles, each will possess its own chorion and amnion; if both germs exist in the same ovum, there can be but one common chorion."

In every case of double monster or joined fœtus, there is unity of sex. This form of malformation occurs once in twenty million of births, and yet in five hundred cases accurately reported, no single exception to this rule is known.

Dr. Fisher says, in regard to the genesis of double monsters, "that they are not the result of an accidental coalition of twins at some uncertain period of their embryonic development, neither do they result from a double egg, that is to say, an egg containing two yolks enclosed in one capsule. They are invariably the product of a single ovum, with a single vitellus and vittelline membrane, upon which a double cicatricula or two primitive traces are developed. The several forms of double malformation, the degree of duplicity, the character and the extent of the fusion—all result from the proximity and relative positions of the neural axis of two more or less complete primitive traces developed on the vitelline membrane of a single ovum. This is not a theoretical opinion; it is an established fact, determined by direct and repeated observation and research, instituted by different embryologists. It furnishes a satisfactory explanation of the several laws which have been discovered to preside over the development of double monsters, viz., the law of homologous union, the law of unity of sex, and the less certainly determined law of transposition of viscera. Homologous union and unity of sex in duplex formations are positive laws."

Hence we see that normal twins with common chorion, and double monster have a like origin, viz., the development of a double cicatricula on the blastodermic membrane of a single ovum, so that the question whether the result of the impregnation of such an ovum shall be normal twins or double monster depends on the nearness of the primitive traces to each other.

But there is yet an interesting fact connected with the genesis of twins, which it is proper here to note, viz., that when there is an anastomosis of the placental vessels, this anatomical condition itself is often the direct cause of grave fœtal deformity. Acardia, or monsters without a heart, are thus produced. A free anastomosis existing between the veins of each placenta, when the heart's action of the fœtus becomes established, if the action of each fœtal heart be equal in force, a thrombus of the anastomosing vessels obtains. But if, as often happens, the heart's forces are not balanced, the stronger blood current in the placenta will push back the weaker one, at first impeding the circulation of the less favored fœtus, then arresting it, and finally causing it to take an inverse direction. "As a result, the heart then atrophies, and the body of the fœtus becomes a simple appendage to the healthy one, the circulation in this now deformed fœtus depending entirely on the heart of the healthy fœtus driving the blood through the placental anastomoses. Such a force being entirely inadequate to drive the blood through the upper portion of the body of the acardia, arrested development obtains, while the favorable position of the lower extremities for receiving blood explains their further though imperfect growth."—*William T. Lusk, M. D., New York Medical Journal, February, 1874.*

EXPERIMENTAL EMBRYOLOGY.

It would be doing injustice to this subject were we to close this already too extended review without mention of the valuable contributions which experimental embryology has made to its elucidation.

Geoffry St. Hilaire first showed the possibility of the production of monsters artificially, but it has remained for M. Dareste, by direct experiment, to submit the process of their production to direct observation, and evolve most of the types of simple monstrosity.

"When eggs are submitted to incubation, the conditions of which differ from those of ordinary incubation, the evolution is disturbed, and there appear anomalies and monstrosities." M. Dareste has employed four processes to this end:

First, A vertical position of the egg.

Second, Diminution of the porosity of the shell with impermeable coatings.

Third, Contact of the egg with a source of heat near the cicatricula, but not coinciding with it.

Fourth, The production of temperatures slightly above or below that of normal incubation."—*American Journal Medical Science, April, 1874.*

By the first two changes the evolution is often disturbed—by the last two it always is. And what is most remarkable is that the nature and kind of abnormality can, in some cases, be foreseen, as, for instance, "the heating of the egg at a point near the cicatricula produces always the same result, viz., a much greater development of the blastoderm and of the vascular area between the embryo and the source of heat." The experimenter thinks that by certain modes of applying heat an inversion of the viscera might be caused. But the fact elicited by these investigations which most strongly throws discredit on the possibility of the mother influencing the form of the fœtus in utero is, that M. Dareste states it as one of the most general results obtained, that monsters have always their origin in that period of embryonic life when the embryo is entirely formed of homogeneous blastema. The monstrous organs first appear with all their teretological characters in blastema, which has been previously modified. He has also observed that arrest of development is the general process of the formation of simple monsters. It first acts directly on certain organs, then the change in these organs involves, consequently, a certain number of changes in other organs, changes characterized by arrest of development, fusion of similar parts, changes in position, etc.

These investigations have farther disclosed the fact that in the formation of abnormalities the amnion plays an important part. Thus the arrest of development of the cephalic hood of the amnion causes cyclopia and various displacements of the head. The arrest of development of the whole of the amnion causes various monstrosities, which are sometimes produced separately, and are sometimes associated, such as eventration, cerebral hernia, deficiencies of limbs, and various incurvations of the spinal column, and deviations.

The influence of the amnion in causing deformities is strikingly shown in the fact that in fishes, although the general types of monstrosity exist exactly as in mammalia, yet, owing to absence of amnion, the class is much less diversified.

From the foregoing review the following facts seem to be well established:

1. That during embryonic existence certain parts may be hindered or arrested in their development, while the other organs not directly connected with them may continue their evolution and become fully developed.

2. That ectropia viscera of the abdomen, spina bifida, cleft palate, hare lip, webbed fingers and toes, etc., are only evidence of arrested development of embryonic abdominal, spinal and maxillary processes, or, in the case of the webbed extremities, the continuation of the embryonic hand or foot of the second month.

3. That any agency causing arrest of development of any portion of the fœtus must necessarily operate prior to the evolution of that part.

4. That the cause of arrested development may be local or general: (*a*). Injuries to the mother's abdomen; (*b*). Diseases of the uterus or its membranes; (*c*). Diseased ovum from diathesis of either parent; (*d*). Hereditary transmission of deformity.

5. That excessive development of parts of the fœtus may obtain, resulting in nevi, aneurisms by anastomoses, supernumerary fingers, toes, etc.

6. That such peculiarities are, in common with family resemblance, frequently transmitted through generations.

7. That intra-uterine amputations are the result of amniotic

bands, placental adhesions, fracture, or from pressure of a loop of the umbilical cord.

8. That amniotic bands or placental adhesions may result from inflammation of the uterus, its decidua, or inflammatory disease of the fœtus.

9. That amputations may be caused by these false membranes, which may be afterwards absorbed, as also the amputated extremity.

10. That so-called double monsters, or fœtus *in fetu*, are the result of the development of a double cicatricula on the blasto-dermic membrane of a single ovum.

11. That twins with a common chorion also result from the development of a double cicatricula on the blasto-dermic membrane of a single ovum.

12. That in either case there is always unity of sex.

13. That the nearness of the primitive traces to each other determine whether impregnation will result in separate twins or double monster.

14. That in twins with single chorion or anastomosis of the placental vessels, one fœtus may become perfectly developed while the other becomes monstrous.

15. That the development of the abnormality in such cases depends on local anatomical causes, and is governed by definite laws.

16. That every known form of malformation in the human race has its analogue in the lower animals, birds, fishes and reptiles.

From the consideration of all these facts the subject is narrowed down to the following questions, viz:

Can the mother's mind so act on the fœtus *in utero* as to cause its arrest in whole or in part, and produce its resulting abnormalities?

Can the mother's mind produce the diseases of the uterus or its membranes which result in false bands or placental adhesions, which cause amputation and other deformities?

Can such impression cause the umbilical cord to encircle and amputate a limb or cause the death of the fœtus?

Can such impression reach or act on the newly impregnated ovum so as to cause the double cicatricula to approach each other so closely as to result in union and double monstrosity?

Is it possible for maternal influence to destroy or deform one fœtus *in utero,* while another enclosed in the same membranes is uninjured?

A large per cent of congenital deformities being shown to arise from local and other causes, which can have no connection with maternal influence, is it probable that at another time exactly the same deformity is produced by maternal impressions?

Is it reasonable that an intra-uterine amputation will be caused in one case by an amniotic band, while in another it may be caused by maternal impressions?

When it is remembered that no nervous connection exists between the embryo and the mother; that there is no direct blood communication; that the mother's mind can have no influence in causing the pathological states which have been shown to be the cause of the malformation; that during the first weeks of fœtal life the ovum is surrounded by anatomical conditions precluding maternal influence, whereas it has been shown that the vast majority of malformations have their origin in that period of embryonic life in which the ovum is still homogeneous blastema; when all these facts are remembered, it cannot be believed that the mother's mind can change the conformation of the fœtus *in utero.*

All modern authors who advocate the affirmative view of this question (Hammond, Dalton, Tuke and others) admit the impossibility of such effect obtaining except through the medium of the blood. Dr. Hammond says the whole matter rests, therefore, on the question as to whether the blood can undergo change through the influence of the mind, and can serve as a means for the transmission of mental impressions. "That it can be so altered, and that it is a medium for communication between the brain of the mother and the fœtus, is sufficiently proved by the records of physiological science as already quoted." The records referred to consist of a statement in the preceding paragraph "that through the blood of the fœtus the mother may be so impressed with the attributes of the father as to transmit them to future offspring." In support of this theory is mentioned (without any history) the case of a mare which had a foal by a quagga, and afterwards had four colts all marked like the quagga. He further says: "It is not uncommon to see children of a widow by her second husband resemble in mind and body her first husband, provided she had children by him;" also, through this influence "it is often the case that the mother comes in time to resemble the father in mental and physical characteristics. Now, how is this effect produced but through the blood of the fœtus coming in intimate relation to that of the mother? The offspring has received certain physical or mental impressions from the father, it conveys them, through its blood, to the blood of the mother, and the latter, in turn, gives them, through her blood, to a subsequent fœtus in her womb. The blood serves as a medium of communication throughout—there is no nervous connection whatever. If through her blood she can transmit certain bodily marks not on her own body to the body of the offspring, why may she not, through the same medium, impart other peculiarities which have produced a powerful impression on her mind."

We have given these views at length to show how far-fetched are the arguments necessary to sustain such a proposition. We believe this to be reasoning from false premises.

1. Where is the evidence that "the blood can undergo change through the influence of the mind, or can serve as a medium for the transmission of mental impressions?"

2. It is not known, neither is there good evidence that the father can through the fœtus give the mother "his mental and physical characteristics."

3. It would seriously conflict with well founded physiological facts to believe that the blood of the mother, which is constantly undergoing change, could retain the impress of the father (given through the medium of the fœtus) for years, and then "transmit certain bodily marks not on her own body to the body of her (next) offspring."

Dr. Dalton's explanation of fœtal abnormality might be termed a mechanical theory, and has at least the merit of simplicity.

"If a nervous shock may excite premature contraction of the muscular fibres of a pregnant uterus and produce abortion, it is certainly capable of disturbing the course of the circulation through the same organ." This is the basis of his etiology, yet he nowhere explains how such a condition of the circulation in the uterus could at one time cause arrested development of an arm, at another a leg, or at another time a failure of closure of the abdominal plates. Again, by his own interpretation, it destroys all relation between the character of the mental impression and the deformity which would follow.

But by far the greatest objection to such a theory is found in the now well established physiological fact, that under normal conditions the circulation in the placenta is exceedingly irregular, arising from the anatomical construction of the vessels, which have their analogue in the cavernous bodies of the penis—"arteries of entrance, veins of exit, and intervening lacunæ."—*Whittaker.*

But Providence has not left the development of the human fœtus "to the influence of maternal whims and caprices—to an imitative metamorphic power which would result in fœtal reproductions of every object which impresses the maternal mind with disgust and horror."

Indeed, we cannot but admire the provisions which have been made to shield it from such influences. Up to the third month its attachment to the mother is far from being intimate, being sustained by imbibition of an albuminous secretion through the walls of the chorion villi, first during its passage along the fallopian tube, and afterward from the mucous membrane of the uterus, by which it is encapsuled. Very recent investigations have shown that even as late as the second month the ovum is loosely attached to the uterine decidua.

It certainly is not reasonable that the mother can influence the fœtus at such a time and under such anatomical conditions. And yet modern experimental embryology, above quoted, proves that the causes of fœtal abnormalities have their origin in that period of embryonic life while the embryo is still homogeneous blastema.

After the formation of the placenta these protective conditions still obtain, for the vessels of the cord and placenta have no vasomotor nerves, thus effectually shutting off the injurious influences of the mental perturbations of the mother, which might otherwise act injuriously on the fœtus.

Facts are also strongly confirmatory of this theoretical reasoning, as instance the great frequency of mental impressions of the mother, and the rarity of any sort of deformity.

Dr. Fisher, who has made it a rule to inquire of women regarding their apprehensions of deformity of their offspring *previous to confinement*, found the larger number of 1,200 cases expressed their fear of such a result, and frequently specified the circumstances and the nature of the deformity. And yet only three cases of any sort of deformity occurred in the entire number, and these could in no way verify the mother's predictions. He justly adds that "all the countless longings of these sixty score and more of pregnant women, their excited imaginations, their shocks from objects of disgust and terror, all the hare lips, the wounds, the armless or legless men they saw, the cats and dogs or other beasts they encountered, were powerless to produce a single case of malformation."—*Am. Jour. of Insanity, January, 1870.*"

William Hunter, the justly celebrated author of "The Anatomy of the Gravid Uterus," made inquiry of 2,000 cases. "In no case did a single coincidence of mental emotion and a corresponding abnormal development occur in all his observations."

But it is to comparative embryology that we must look for the most conclusive evidence, for it is now settled by indisputable proofs that every known form of monstrosity found in the human race has its analogue and even occurs more frequently in the lower animals, birds, fishes and reptiles. Now, if we ascribe such abnormalities in the lower animals to impressions made on the brain of the mother, the argument here ceases. For we know it matters little whether the hen hatches her own eggs, or a duck, goose, dog, cat, or even artificial heat, perform the same office. Chickens will always be the result.

Again, in the case of the eggs of fish, embryonic development goes on without any reference to the female which deposited them, provided the required heat, light, etc., be acting. And in both the eggs of fish and fowl thus incubated are developed all of the known types of monstrous formation occurring in man.

If such deviations from the normal states obtain in fish and fowl under circumstances precluding maternal influences, how is it possible to ascribe them to such influences when occurring in the human race?

THE CAUSE OF CHOREA.

By Henry B. Baker, M. D.

Recently, while at Albany, N. Y., I called upon Prof. George T. Stevens, M. D., who thinks he has attained to a knowledge of the most frequent, if not the only, cause of chorea, sometimes popularly called St. Vitus dance, a serious disease, not infrequently affecting school children, and which has received some attention by this board.* Dr. Stevens kindly explained to me his views, so far as could well be done in the short time at our disposal, gave me a copy of his paper on the subject, which he read before the New York Academy of Medicine, June 15, 1876, and mentioned some additional evidence which he had since collected. I give Dr. Stevens's view of the causation of chorea in his own language, as follows:

"When the normal eye is at rest it has a clear and distinct vision of objects at a distance—that is, at twenty feet or more. As the object viewed approaches the eye, its refraction must be changed, otherwise the image would become dimmed and indistinct. The adjustment of the eye to different distances is performed, unconsciously to the individual, by the contraction of the ciliary muscle, through which the convexity of the crystalline lens is modified. The function by which the eye is thus adapted to different distances is called the function of accommodation. As the object approaches more and more near, the ciliary muscle contracts more and more, until at a certain point it can contract no longer.

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*This paper was read at the meeting of the State Board of Health, October 10, 1876.

"If a person with normal eyes brings the object very near them, and thus forces this muscle to unusual contraction, he finds that it soon fatigues, and he can no longer see the object well, for the maximum of the contractile power of this muscle soon exhausts itself.

"In cases of hypermetropia, clear and distinct vision, even of distant objects, can only be obtained by an effort of the accommodative faculty; hence, as the object approaches, the function of accommodation is more severely taxed than in normal eyes. It follows that, while normal eyes are always at rest when accommodated for distance, hypermetropic eyes are never at rest except when closed, and that, when viewing near objects, an excessive effort is required, and that this excessive effort is increased in proportion as the hypermetropia is more considerable.

"Another important fact in this connection is, that, as the object viewed approaches the eyes converge. This may be easily seen by any one who will watch the eyes of another before whom he moves a pencil or other object backward and forward, while the person observed fixes his eyes upon it.

"The effort at accommodation and the effort at convergence are, therefore, simultaneous. They are also proportioned to each other, so that normal eyes accommodated for twelve inches are also converged for twelve inches; but in the hypermetropic person the balance is lost, and such person who accommodates for twelve inches requires an exertion on the part of the ciliary muscle equal to accommodating the normal eye for a nearer point—we will say, for six inches. In such a case, a corresponding convergence of the eyes will take place, and so, while the eyes are accommodated for twelve inches, they are converged for six. Confusion of nervous and muscular action is the result, and to this confusion are due the pain, nausea, and vertigo of the average youth who attempts to read with his grandfather's spectacles, and this is the constant state of confusion of nerve and muscle in cases of anomalous refraction.

"Let it also be borne in mind—and it is a point to which I am not aware that attention has been called—that young children have their eyes almost always accommodated for near objects. The baby has no interest in the landscape; he plays with his toes, he gazes admiringly at the raspy finger of his nurse Peggotty, held a foot from his nose, or he clinches his rattle in his tiny hands, and stares at its glistening surfaces; at three, four and five, he looks at pictures and toys; at six and seven he is sent to school, where he is forced to look at books. * * *

"Thus it is that in earliest years the ciliary muscle is in a constant state of extreme tension, and that in case of hypermetropia there is perpetual conflict between this muscle of accommodation and the muscles of convergence, except, as it often happens, there is a compromise by which one of the eyes agrees to a permanent squint, thus affording much relief to the little sufferer and great distress to its anxious parents.

"It is while this irrepressible conflict is going on, and while the child with its impressible nature is suffering from this constant fatigue and irritation from muscles overtaxed by extreme tension, and vexed by their failure to harmonize, that he is overworked at school, or is overtaken by measles or whooping cough, or other infantile disease, and while thus debilitated is made an easy victim of the nervous irritation from which he has never been free. Or, perhaps, while on the verge of a loss of control of his muscles, a sudden fright or disappointment becomes the last infliction beyond which the tired and exhausted nervous system can endure no more."

In the paper just quoted from, Dr. Stevens supports his view by thirty-three cases of chorea, in which he had investigated the condition of the eyes. In a note at the close of the article he mentions eight other cases since examined, and then sums up the evidence as follows: "Adding these to the cases above reported, we have forty-one cases of chorea, in every one of which anomalous refraction occurs, as follows: hypermetropia, twenty-seven; hypermetropic astigmatism, six; myopic astigmatism, five; unequal degrees of myopia, three; total, forty-one."

Taking the evidence as above summarized alone, it might tend to prove only that chorea and anomalous refraction of the eye are coincident, and both possibly due to a common cause; but Dr. Stevens goes further, and presents evidence tending to the belief that the acting cause of chorea is removed by simply relieving the eye strain. He mentions several cases in which the chorea rapidly disappeared after the patient had used spectacles suited to the particular case, as determined by a skillful professional man.

For my own part, I was previously prepared to look favorably upon this evidence, for when at our meeting in January last a communication from Dr. Hull, of this city, was read, giving some evidence tending to show that excessive gymnastic exercises were in some way connected with chorea, you may remember I suggested *long-continued muscular restraint* as an element in the causation of the disease. Dr. Stevens seems to believe that the muscular restraint or tension is literally "all in the eye," and he presents the evidence of forty-one cases of chorea examined by him, in all of which there was abnormal tension in the muscles of that organ, and he states that in most of these cases this serious disease could be and was easily remedied by such comparatively simple measures as having the eyes examined by a skillful person familiar with this subject, and the use of such glasses as were in each case found suitable.

I think it may well be doubted, however, if the generalization relative to the cause of chorea can be so restricted as Dr. Stevens seems to think; and it may yet be found that continual muscular tension and consequent nervous exhaustion *in any part of the body* may result in chorea.

Dr. Hal C. Wyman, of Blissfield, Mich., has told me of a case at Ann Arbor, a few years since, of a man who had chorea, from which he recovered soon after the removal of a piece of an iron nail from the bottom of his foot, which nail had been in the foot for a considerable time. In this case the chorea could hardly have been caused, or at least maintained, by abnormal refraction of the eye and consequent eye strain, for the patient recovered without changing the condition of the eye, so far as known. The eye was probably not examined, however. In this case it would have been interesting to know whether abnormal refraction was coincident with the chorea.

Dr. Wyman has also mentioned to me a case of chorea which was apparently caused by worms (ascarides) in the lower bowel, and in which the patient recovered on the removal of this cause of nervous irritation.

Most person have observed that when they were tired by labor of almost any kind, their movements have frequently become tremulous. This tremor may be made to very closely resemble chorea by severely and suddenly overtasking the muscles of the body, as occurs in rapidly climbing a ladder, or even in rapidly ascending stairs, lifting heavy weights, etc. It is worthy of remark that in these cases the imperfect control of muscles is greatest in those muscles which have been most severely overtaxed—of those in the arms when they have been most strained, and in the legs when the legs have been subjected to the greatest strain. Although in these cases the choreic movements usually soon pass away after cessation of the muscular action which caused them, it is conceivable that in certain cases the nervous system may be unable to again recover its former vigor, and the sudden cause may thus result in the persistent tremor called chorea. Dr. Stevens seems to recognize this, except that he supposes it only to occur in individuals suffering from abnormal refraction of the eye, for he says: "Or, perhaps, while on the verge of a loss of control over his muscles, a sudden fright or disappointment becomes the last infliction beyond which the tired and exhausted nervous system can endure no more." It certainly seems rational, however, to look for a persistent cause of a persistent disease, and this is entirely in favor of Dr. Stevens' view so far as it supposes eye strain to be *a* cause of chorea, but if persistent irritation and strain in the muscles of the eye will cause chorea, there seems *a priori* no weighty reason why persistent irritation and strain in other muscles *may* not have a similar result, and in the cases mentioned by Dr. Wyman no other explanation than this would seem to account for all the facts.*

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*The essential difference between the causation of chorea and of tetanus is certainly a question of importance. I have elsewhere suggested the question whether choreic and tonic spasms may not be dependent upon causes the same in kind, but different in degree; but I now desire to suggest the question whether it is not true that, in a majority of cases, chorea results from the impressions upon the nervous system which lead to *exhaustion of voluntary nervous energy*, while tetanus results from those irritations or impressions which lead to powerful stimulation first of the *sympathetic* nervous system, the action of which is slowly excited but much more

Chronic movements are not infrequent among old persons, but that such movements have some special cause apart from age appears probable from the fact that not all old· people are so affected. Must this affection be attributed in every case to the abnormal refraction which we know so frequently exists in the eyes of old people?

I have observed that certain medicines, particularly quinine, under some circumstances and in certain doses, will temporarily induce a tremulousness bordering upon chorea. This seems to show an extension of the ordinary effect of quinine to the voluntary muscles, its ordinary effect being upon the involuntary (non-striated) muscular system, notably upon the blood-vessels, probably through the influence of the vaso-motor nerves. This (quinine) is a substance which enters the general circulation, and its action in the body is probably in some respects general. The tremulousness induced by it is general. In the cases of chorea mentioned in a communication to this board by Dr. Hull, he spoke of the choreic movements as being similar to those made in the gymnastic exercises which the children had undergone. He said it seemed as though some of those movements had become automatic—involuntary. It seems difficult to acount for this on the supposition that the chorea was mainly dependent upon strain of the "muscles of accommodation," but if we suppose that *chorea may be caused by nervous irritation tending to excessive muscular action in any part of the body*, all these cases seem to receive adequate explanation, and it is entirely in accordance with this view that the choreic movements are first manifested in those muscles which have been most severely overtaxed.

These views have in them so much of probable truth that it seems important that they be tested as fast as possible, and there is strong hope that through better directed efforts for its study in the future this serious disease may soon be definitely placed within the list of preventable diseases. To Dr. George T.

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continuous and then extends to muscles usually under voluntary control, such extension being sometimes partly by reason of pain through irritation or compression of sensitive nerves, but mainly by reason of the close connection between the sympathetic and the cerebro-spinal systems of nerves, and their similar distribution.

Stevens, of Albany, N. Y., great credit is due for his very important contribution to our knowledge of this subject. In this connection the communication to this board from Dr. Hull, of this city, should not be forgotten.

LANSING, Mich., September, 1876.

ABDOMINAL ANEURISM—A CASE.

Read before the Detroit Academy of Medicine, by Dr. Johann Flintermann.

MRS. MARKOW, 28 years old, married and mother of four children, the youngest being one year old, having always been a healthy woman, and during her married life used to hard work, has been suffering for a few months past from more or less disturbance in the digestive organs. In the warm months of the late summer she often had diarrhœa, more of a chronic character, the evacuations mixed sometimes with blood; a kind of heavy feeling in the abdomen, with occasional sickness in the stomach. One time she had a severe attack of vomiting and purging, which was declared by the attending physician to be cholera morbus. At last, a few weeks ago, the condition of the poor woman became alarming to the members of the family, as she apparently commenced to fail in every respect. I was called to see her in the middle of September, when I found her in the following state: The patient was lying in bed, hardly able to move herself, complaining of a severe pain in the left lumbar region, which was very tender on pressure; a numb feeling in both legs and arms, which were not swollen to any extent, and the patient was not able to walk, as she had no feeling in the soles of her feet. The face was swollen, eyes œdematous, red, and the conjunctiva scleræ injected; tongue coated, disagreeable taste in the mouth, sickness in the stomach, breathing short, and the expansion of the chest during inspiration not very extensive; complained of a pressing pain in the region of the sternum; the skin of the chest covering the sternum was œdematous, tender, hardly bearing the slightest pressure; heart beating fast, but careful examination of lungs and heart did not reveal any disease of these organs; liver seemed to be enlarged; in the region between the processus ensiformis sterni and the navel, on the left margin of the linea alba, is distinctly to be seen a pulsating movement through the abdominal walls; the fingers laid upon this spot are elevated by this pulsation; through the abdominal walls a tumor can be felt, the size of which could not be ascertained. Pressing this tumor gives a heavy dyspnœic feeling to the patient, and is very painful. Auscultation on this spot brings to observation a blowing noise coincident with the systole of the left ventricle; pulse in the radialis and femoralis on both sides not delayed; the femoral artery in each side showing for a few days a vibrating pulse; the skin is wet from a profuse perspiration, but not altered in color; superficial veins not enlarged; bleeding from the nose, diarrhœa and occasional sickness in the stomach. The examination of the urine showed no albumen. I did not hesitate to take this as a case of aneurism of the aorta abdominalis, and I was more inclined to do this the day following the first examination. The patient complained then of a severe pain in the toes of the right foot, which were swollen, the several toes being red and showing all symptoms of suppressed circulation; on the inner side of the right ankle was a large circumscribed red spot; pulsation in the tibialis postica could distinctly be felt; the left foot was nearly in the same condition, but less painful. The pain in the right foot was very severe, and rendered the patient insensible. After a few days the right hand became affected in the same manner, and after a week the left knee commenced to swell and aggravated the painful situation. Temperature always very high, pulse frequent, patient very thirsty, complaining of chills at different times of the day. Sometimes she was attacked by a feeling as if something would compress her whole chest; so intense was this feeling that she could not breathe, for a moment losing her sight and being unable to speak, but not unconscious.

After two weeks' treatment the pain in the back, the feet and in the knee, as in the right hand, has subsided, the swelling is diminishing, but the pulsating tumor in the abdomen is still more or less unchanged. I am inclined to consider the swelling of the toes and the feet as caused by embolic process, which would not be a difficult task to prove. But what is so very interesting to me, and what I want to lead your attention to, is the similarity of the symptoms with those of acute rheumatism; so that from now I shall not omit to examine every case of acute rheumatism from the standpoint of the possible existence of an aneurismac process in some region of the body. I am fully aware of the bold suggestion I am expressing, but should I succeed in proving such a connection between aneurism and articular rheumatism, it would give us a new light in the theory and treatment of so painful a disease as rheumatismus acutus. The suggestion that articular rheumatism could be caused by embolic processes has already been made by several other medical men, but previous endocarditis was taken as the cause; and as far as I know aneurism has not been hitherto named as the cause.

To-day, the 8th day of October, I am able to report that the rheumatic pain and the swelling of the feet, knee and hand are nearly gone, and the patient feels in every respect relieved, with the exception of a general restlessness and diarrhœa, which cause her great trouble. The tumor in the abdomen shows the same condition, and gives to careful auscultation that blowing noise characteristic of aneurism. The treatment I followed does not give any new ideas, as I administered acetate of lead in free doses, relieved pain by subcutaneous injection of morphine, and applied an ice bag on the spot where the pulsation was the most distinct. Perhaps it will be of some interest to you to know that I used one day salicylate of sodium in a dose of half an ounce in twenty-four hours, which produced a profuse perspiration, at the same time reducing the temperature and diminishing the swelling and pain in the limbs.

Reports of Societies.

DETROIT ACADEMY OF MEDICINE.

Tuesday Evening, September 26, 1876.

The society met at the office of Dr. Inglis, the president, Dr. Andrews, in the chair.

The minutes of the last meeting were read and approved.

Communications were received from Drs. Toner, of Washington, D. C., and S. C. Gordon, of Portland, Me., acknowledging receipt of diplomas, and returning thanks, etc., to the society for the honor conferred in making them honorary members.

PATHOLOGICAL SPECIMENS.

Dr. **McGraw** presented to the society the walls of an ovarian cyst that he had removed from a patient two weeks previously. The doctor gave the following history of the case: "About five weeks ago I was called to see a little girl twelve years of age, who had an abdominal tumor of some three months standing; diagnosed an ovarian cyst, and at that time introduced a trocar and drew off about two gallons of bloody fluid. In this fluid there were none of the 'ovarian corpuscles' which Atlee speaks of as pathognomonic of ovarian cyst.

"I saw the patient again in three weeks, and found that an enormous reäccumulation of fluid had taken place, greatly distending the abdomen, which measured thirty-four inches in circumference. The ribs were bulged out, and the breathing very much interfered with.

"As the patient was in imminent danger, I determined to operate. On opening into the abdomen, found a cyst of the left ovary, which was partially collapsed, its walls being soft and friable, so much so that it broke apart on removing it. The reäccumulation of fluid was largely ascitic, due, I believe, to the irritating effects of the fluid that had escaped from the cyst through the opening made in the walls by the trocar at first operation. This opening was readily found, and by squeezing the cyst a jet of bloody fluid could be forced out."

The doctor had not been able to find any of the ovarian corpuscles in the fluid of the tumor after removal, and requested Dr. Andrews to examine the specimen, and report the result of his investigation at some future meeting. The patient made a good recovery.

PREVAILING DISEASES.

Dr. **Carstens** reported two cases of a peculiar form of skin disease affecting the parts about the genitals, which had occurred in his practice. Both cases were in children two years of age, and in each the disease had had a duration of about ten days. The skin seemed to be inflamed and excoriated, with tendency to ulceration. The patients complained of pain on passing water and feces, but in every other respect they seemed perfectly well. Dr. C. did not think the disease syphilitic.

Dr. **Spalding** said that he had recently seen two or three cases of well marked diphtheria, the membrane being very thick and dense in each case, and extending over the tonsils and contiguous parts. The patients all recovered. The doctor said that he knew of several fatal cases in the same vicinity.

Dr. **Gilbert** said that he was called to see a lady with diphtheria; both tonsils were covered with false membrane, face flushed, in fact, all the symptoms were of considerable intensity; he prescribed a mixture containing muriated tincture of iron and chlorate of potash, which the lady could not take, on account of the incessant vomiting that it induced. On visiting her the next morning, the doctor found that the membrane had entirely disappeared, and he did not know whether to attribute the cure to the emesis or not, but thought he would try the effects of ordinary emetics when similar cases presented themselves.

Dr. **Connor** had seen several cases of nursing sore mouth which had yielded readily to treatment with salicylic acid. His method of using the acid is to mix about five grains of acid with a drachm of sugar of milk, and apply a small quantity to the parts.

Dr. **Andrews** had also seen several cases of ulcerative sore mouth in children. He had used salicylic acid, and found that the children could not stand it. He had used, with very beneficial results in some cases, biniodide of mercury, one grain to the ounce, dissolved by means of iodide of potassium in excess (two grains to one ounce), locally.

VERBAL COMMUNICATIONS.

Dr. **McGraw**—A woman came to the clinic this morning with a round, even tumor as large as a hen's egg on the clavicle at the outer side of the origin of the sterno-mastoid muscle. While in the act of reaching up the hand this morning she felt something give way, and immediately noticed this swelling. There was no displacement of the bone, and I diagnosed partial fracture, with effusion of blood into the tissues. Dr. McGraw inquired of Dr. Spalding: "Through the action of which muscle do you think a fracture could have been produced in the simple act of putting up the hand?"

Dr. **Spalding** did not say, but thought there might have been a deficient amount of phosphates in the bone.

Dr. **Johnson** asked if there might not have existed some disease of the clavicle previously to the accident.

Dr. **McGraw** said that he would inquire more particularly into the history of the case, and report it more fully.

The amendment to section D of by-laws, changing the time of the annual meeting from the second Tuesday in September to the fourth Tuesday in October, was adopted.

On motion, the society adjourned.

JAS. D. MUNSON, M. D., *Secretary.*

ABSTRACT OF THE PROCEEDINGS OF THE MICHIGAN STATE BOARD OF HEALTH AT THE REGULAR MEETING, OCTOBER 10, 1876.

THE members present were Dr. H. O. Hitchcock, president, Dr. R. C. Kedzie, Dr. A. Hazlewood, Rev. C. H. Brigham and Henry B. Baker, secretary.

DR. KEDZIE presented two drawings illustrating his paper on "Ventilation of Railroad Cars," ordered published in the annual report.

A paper on the "Water-Supply in Michigan" was presented by Dr. Kedzie. The paper treated of the geological formation of the State as affecting the water supply, the mechanical and chemical effects of the different kinds of soil upon the water filtered through them, of the impurities usually found in water supplies, of graveyards and other sources from which these impurities frequently arise, and of methods of improving the quality of waters now used. It stated that the only *sure* way to detect impurities in water is by a careful chemical analysis, yet there are tests which can be applied by any one, which give strong *probable* evidence, such as smell before and during boiling, taste, and especially Heisch's test, which consists in the addition of one-half teaspoonful of pure sugar to a pint of the water in a bottle partly filled, set in a warm, well-lighted place for forty-eight hours. The presence of cloudy matter indicates impurities. The paper is to be published in the annual report.

DR. BAKER presented additional material for a paper on the "Death Rate as Influenced by Age, Climate, etc," consisting of tables, charts, maps diagrams, etc., and mentioned that he had found a way by which a comparison of the death rates of different States could be made without the necessity of computing a life table for each locality.

DR. HITCHCOCK read a paper on "Criminal Abortion," showing that the present laws in this State have been derived from views held in past ages, and are not in conformity with our present knowledge of physiology. The paper will be published in the report.

DR. HAZLEWOOD read a paper upon "Water," based largely upon replies of correspondents to a circular sent out by the Board. He stated the chemical composition of water, the impurities usually found, the amount needed by each person daily for all purposes, which he placed at one hundred gallons at least, the healthfulness of different kinds of water, the sources of the water supply of this State, the way to obtain the best cistern water, and the danger of using water which had been in contact with lead pipe. The paper will be published in the report.

DR. BAKER read a paper on the "Cause of Chorea," reviewing the evidence lately published by Dr. George T. Stevens, of Albany, N. Y., and some other not heretofore published.

Dr. Hazlewood made a report relative to the sanitary condition of the State Public School, advising postponement of further examination until after some proposed improvements at the institution have been finished.

Dr. Hitchcock reported the proceedings of the International Medical Congress, at Philadelphia, September 4th, which he attended as a member, and for the purpose of securing whatever might promise to be of use in his labors in this Board for public health in Michigan.

Dr. Baker reported the proceedings of the Health Department of the American Social Science Association, at Saratoga, September 8th. He gave abstracts of each of the papers read, most of which related to the improvement of the sanitary condition of schools and school children.

Dr. Baker also read a report on "Methods of Collecting Vital Statistics," in which he urged an amendment to the present law, which he held would increase the value of the statistics, and not materially increase the cost of collection. A proposed circular of instruction relative to the restriction and prevention of scarlet fever was discussed at length, and is to be revised and issued for the benefit of the public health in Michigan.

A circular to correspondents, asking for statements of cases and of facts concerning scarlet fever was also discussed, and it is to be issued when perfected.

A communication from J. H. Beech, M. D., was read, giving the details of the drowning of nine persons at Bawbeese Lake, and containing suggestions for the prevention of similar occurrences. It was received with thanks. Dr. Beech also reported the unusual prevalence of diphtheria at Union City, and suggested that it afforded an opportunity for studying its causes.

Dr. Baker made a report in reference to the duties assigned him, and of a portion of the work done in the office since the last meeting.

The annual report of property, expenditures, etc., was also made, the time having been changed from April to October. This report covers a period of six months only. The following are the items:

Chemical Analysis		$ 10.00
Engraving, Drawing, etc.		125.00
Expenses of Members	Attending Meetings	52.75
	Other Official	58.05
Instruments and Books		14.90
Paper, Stationery, etc.		12.90
Postage,	Office	177.55
	Members	4.00
Printing and Binding		46.45

Secretary		$1,000.00
Miscellaneous,	Express	29.45
	Otherwise	20.17
Total		$1,551.22

The property on hand consists of stationery, meteorological and other instruments, and more particularly the library, which is continually increasing in value.

The replies of correspondents relative to prevailing diseases in Michigan in 1875, and also some results of the weekly reports of prevailing diseases up to September 30th, are to be published in the annual report.

Correspondence.

VITAL STATISTICS OF THE CITY OF DETROIT.

Editors of Detroit Review of Medicine:

January, 1874	152	August, 1874	291
February	127	September	241
March	192	October	206
April	211	November	162
May	187	December	182
June	172		
July	263	Total	2,286

Per centum 21 in 1,000.

The per centum of deaths in this city has steadily decreased since 1870. I shall try to account for this in my next report.

AUGUST, 1876.	Under 8 years.	Over 8 years.	Temperature.	Humidity.	AUGUST, 1876.	Under 8 years.	Over 8 years.	Temperature.	Humidity.
1	8	2	75.0	49.3	17	4	3	73.5	68.0
2	4	3	74.5	49.7	18	7	5	75.0	71.0
3	3	2	72.2	77.3	19	7	4	74.5	72.0
4	5	6	75.5	76.3	20	3	2	60.7	57.0
5	2	2	72.2	86.7	21	5	1	62.7	61.8
6	5	3	74.5	83.3	22	7	3	68.2	57.0
7	2	2	73.5	65.3	23	3	2	74.7	75.3
8	13	1	71.7	63.7	24	6	5	76.7	74.0
9	4	2	73.5	61.0	25	4	2	71.0	60.7
10	5	0	76.2	72.7	26	5	2	63.0	51.7
11	2	0	74.7	85.7	27	4	2	63.5	57.7
12	10	2	77.0	78.3	28	5	1	67.7	57.0
13	2	4	79.0	73.0	29	4	2	71.0	56.0
14	3	1	78.2	73.3	30	1	0	72.5	79.3
15	3	3	69.0	74.3	31	2	0	75.7	79.7
16	10	3	68.2	66.0					
						148	70	—218	

There were in August, 1875, 242 deaths, being 24 in excess of this year. I am not able to give a detailed statement for that year, however. Malarial troubles prevailed during this month (August, 1876). The healthfulness of the city is due in great part to our admirable sewerage system; at the same time, many districts and houses are not properly guarded from the return of stench. Yet we have but little typhoid fever, while in suburban districts, undrained, typhoid troubles prevail.

Some cases of small-pox are reported at police headquarters.

The coroner reported one case of accidental drowning, one case of accidental death on Michigan Central Railroad, and one case of death from wound from blow on head.

C. C. YEMANS, M. D.

Hereafter we expect a monthly report by Dr. Yemans on the vital statistics of the city of Detroit.—Eds.

Condensations from our Exchanges.

PRACTICE OF MEDICINE AND THERAPEUTICS.

Chronic Pneumonia of the Apex in Children—Its Early Symptoms.—The difficulty in recognizing this disease is well known. Dr. L. Fleischmann (*Boston Medical Journal*, August 10, 1876), gives the following important symptoms observed in teething children:

1. One-sided swelling of the lymphatic glands of the throat, back of the neck, or of the sub-maxillary region, when other local causes, such as pharyngitis, parotitis, alveolar inflammation and diphtheria can be excluded, causes strong suspicion that there is pneumonia of the apex of the same side. The glandular swelling continues while the process in the lung is active, and ceases when the lung infiltrations become stationary, the glands swelling and subsiding again with each advance of the inflammation.
2. Certain obstinate forms of conjunctivitis which, in spite of all treatment and without apparent cause, return from time to time with great severity, if but one and always the same eye is attacked, point with great probability to disease of the lung of the same side.
3. Eczema of one-half of the face or head, which heals with difficulty and frequently occurs, sometimes alternating with or accompanied by ophthalmia of the same side, should lead to examinations of the lungs where pneumonia of the apex of the same side is often present.
4. Certain sympathetic disturbances of one side of the face or head, having frequent changes in color, from flushing to pallor; transitory circumscribed erythema of the cheek or temple always on the same side, the easy production of Trosseau's maculæ, which also accompany meningitis, cerebral tumors and other diseases to be excluded, often indicate pneumonia of the apex of the same side.
5. Intermittent sympathetic neurosis affecting one side of the head, characterized by redness and elevation of the temperature of the skin of the affected side, are often observed in children with lung infiltration of the same side.

6. Finally, neuralgias of the trigeminus, occulo-motorius and vagus occurred and disappeared during the process in the lung of the same side in such a manner that no certain relation between the two could be determined. These symptoms were observed in so many cases that the author regards them as reliable symptoms.

PLEURAL EFFUSIONS—THEIR TREATMENT.—Dr. C. A. Ewald (*Centralblatt—Medical Reporter*, September 30, 1876), states that from a series of observations made in Frerich's wards with special reference to operative interference, he concludes:

1. In cases of serous effusion in the pleura, puncture should be performed before the third week only if life be in danger.
2. If puncture be made under exclusion of air and with previous disinfection of the instrument, no serous exudation becomes purulent
3. The only means of determining with certainty whether a pleural effusion is serous or purulent is an exploratory puncture.
4. Incision with puncture should be made as early as possible into purulent exudations.
5. The mortality after incision into purulent effusions is from fifty to sixty per cent when they are treated according to the present plan (incision in the sixth intercostal space, between the nipple and the anterior axillary line, washing out with disinfectants once or twice daily, a catheter being retained in the wound, or one or more ribs resected).
6. Sanguineous effusion is always the result of malignant growths of the pleura.
7. Serous exudations do not exclude the presence of tuberculosis and cancer of the pleura.

PHYSIOLOGY.

CONDITIONS FOR NORMAL DEFECATION.—In a very instructive paper, Dr. B. Lee (*Philapelphia Times*, August 19, 1876), gives these as follows:

1. Objectively a support of the proper height, with an aperture of the proper shape and dimensions.
2. Subjectively (*a*) a healthy, vigorous tone of all the muscles of the trunk, but especially of the abdominal muscles; (*b*) activity in the peristaltic action of the colon and a normal condition of its secretions; (*c*) a sensitive condition of the mucous membrane of the rectum just within the sphincter; (*d*) a rectal cavity of normal size; and (*e*) a stout *levator ani.* These conditions may be promoted by such exercises as will tend to develop the abdominal and expiratory muscles without making a drain upon the nervous forces, by manipulations with a view to directly assist the peristaltic labors of the colon, by pressure and percussion directed to the arousing of the sacral plexus to activity, and by direct support to the distended rectum and paralyzed *levator ani.* The judicious and persistent use of these means, combined with hygienic measures directed to the improvement of the general tone of the system, would go far toward breaking up the pernicious habit of medicinal cathartics.

INTESTINAL SECRETION AND MOVEMENT.—Dr. McKendrick (*British Medical Journal*, September 23, 1876), in behalf of a committee appointed to investigate the above problem, reported the following conclusions:

1. Application of various soda and potash salts to the intestinal mucous membrane produces a more or less profuse secretion—that caused by sulphate of magnesia, acetate of potash, sulphate of soda and tartrate of potash and soda being more abundant.

2. The presence in the intestines or in the blood of atropia, morphia, chloral, etc., does not prevent the abstraction of sulphate of magnesia.

3. The splanchnic nerves are, as usually admitted, the vaso motor nerves of the intestines, but either have no centrifugal fibres to their muscular coats, or affect them only indirectly by diminishing their supply of blood.

4. The secretory nerves of the intestines have the small ganglia of the solar and superior mesenteric plexuses for their centres, and this secretion is unaffected by the splanchnics, the vagi or the dorso-lumbar parts of the cord.

5. Destruction of the lumbar part of the cord, after extirpation of the solar plexus, produces hemorrhage or hyperæmia of the intestinal mucous membrane, which is absent after division of the splanchnics, destruction of the semi-lunar ganglia and solar plexus, or division of the mesenteric nerves themselves.

6. The splanchnics are the afferent nerves for peristalsis of the intestines, the efferent stimulus probably reaching the inter-parietal ganglia through the lumbar cord and abdominal sympathetic, the former effect being inhibitory, and the latter stimulating these ganglia.

NERVE OF VISION—ITS IDIOSYNCRASIES.—Dr. Beard (*Hay Fever*, page 107) gives a list of them, as follows: Some cannot bear the sight of certain animals; a brave officer of the British navy could not endure the sight of a cat. James I, of England, could never bear the sight of a drawn sword. In one sturdy young man the presence of a cat caused cold sweating and a desire to urinate. Cows, elephants and turkeys, are made angry by the sight of anything red. Duke d'Epernon fainted at the odor of a hare, and a lady of high degree was taken with nausea, faintness and vomiting by the smell of vinegar.

PHYSICAL AND INTELLECTUAL QUALITIES OF MAN—THEIR MEASUREMENT.—Dr. Baxter (*Med. Statistics Provost-Marshal's Bureau*, vol. 1, p. 83,) gives as a summary of the conclusions reached by investigators in anthropometry the following: (1.) There is a perfect form or type of man, and the tendency of the race is to attain this type. (2.) The order of growth is regular toward this type. (3.) The variations from this type follow a definite law, the law of accidental causes. (4.) The line formed by these variations, when arranged in groups receding on either side of their mean, is the curve well known to mathematicians as the binomial; it was first applied by Newton and Pascal to questions of astronomy and physics, but is applicable to all the qualities of man which can be represented by numbers. (5.) The more numerous the data obtained by actual measurement, supposing them to be made with reasonable care and without bias, the more nearly accurate is the mean result, and the more closely does it correspond with that obtained by calculation.

OBSTETRICS.

WHEN AND WHY WERE MALE PHYSICIANS EMPLOYED AS ACCOUCHEURS?—Dr. Wm. Goodell (*American Journal Obstetrics*, August, 1876), in a very interesting paper answers the above question. It was just subsequent to the discovery of the art of printing that male physicians began to act as accoucheurs, and thus destroy the monopoly of widwifery by midwives. The reason for this change seemed to lie in the fact that the people became wiser, read more books, so that they could appreciate the ignorance of the midwives. Physicians developed with the times, the midwifes did not. The former wrote elaborate works on obstetrics, which the latter, with rare exceptions, could not even read. What more natural than that intelligent women should prefer the teacher to the inapt pupil—should place their lives in skilled hands rather than in those which were unlettered. What more inevitable than that the male physician who was hurriedly sent for in cases of emergency, or was kept waiting in an ante-chamber for such emergency, should, despite tradition, prejudice and religion—should, in spite of himself, for it was long deemed dishonorable for him to practice midwifery, ultimately usurp the place of the midwife by the bedside of the woman in travail ?

PUERPERAL ECLAMPSIA—FACTORS IN ITS PRODUCTION.—Dr. A. Macdonald (*London Obstetrical Journal,* August, 1876) gives these factors as follows:

1. *Predisposing*—Special weakness in the nervous system, either congenital or acquired by depressing circumstances, and possibly also aggravated by impaired nutritive cerebral changes through an imperfectly depurated blood arising from diseased kidneys.
2. *Efficient*—In addition to the above, anæmia of the cerebral motor centres, induced in the manner in which Traube and Rosenstein explain its production, which is under conditions most favorable for its causation, if it does not take place only then when the blood is increased in bulk, and rendered hydræmic by the co-existence of kidney disease in some of its forms.
3. *Exceptional*—But in certain cases where no kidney disease is present, it is difficult to see how the mechanical conditions required by the above theory can be obtained, and these are naturally explained by the theory of reflex spasm of the cerebral arteries, induced by irritation traveling from the uterus centripetally to the great motor centres of the brain in the manner in which Cohen explains the origin of his eclampsia uteri matura. In this case, also, we need to predicate the existence of specially predisposing causes affecting injuriously the nervous system of the mother.

PUERPERAL ECLAMPSIA.—Dr. H. F. Campell (*American Journal Obstetrics*, August, 1876), in a very elaborate paper, reaches the following conclusions respecting puerperal eclampsia:

1. At the present time we cannot recognize either cerebral plethora, cerebral anæmia, uremia, or other toxic condition of the blood as furnishing a uniform etiology for puerperal eclampsia.
2. The proximate cause of puerperal eclampsia is *nervous irritation.*
3. To accept this to many manifest truism, is to make a certain advance in the relinquishment of the uncertain, conjectural and unknown.
4. In view of this cause, the sole indication of all treatment is to *be quiet and to subdue irritation.*
5. To meet this indication we have opium by hypodermic injection with atropia. Next to opium is blood-letting, or better, the two may be combined.
6. In regard to the bromides, to chloroform, to chloral, to quinine, to applications of ice and cold effusions, as well as to a large number of other remedies, *one common therapeutic endowment* seems, in varying degrees, to be possessed by them all; that they all like venesection, nervous sedatives, *are subduers of nervous irritation*, and that falling into singular coincidence, by general consent their therapeutic action, like that of venesection, is accompanied by one common physical result—that of lessening the amount of blood in the brain.

PUBLIC HEALTH.

Disposal and Utilization of Sewerage and Refuse.—The Public Health Section of the International Medical Congress, after hearing a paper on the above subject by Dr. Henry Hartshorne, adopted the following conclusions:

1. Every plan for the laying out or extension of a city or town should have, as an indispensable part of it, a corresponding and co-extensive plan for the continuance or substitution of the natural drainage of the locality, and for the proper construction of a system of sewers.

2. The question in regard to the removal of waste and impurities from towns is not as to the maintenance of sewers, but as to whether they should be depended upon alone, or should be supplemented by other means of conservancy.

3. Every sewer not supplied with a sufficient flow of water to secure the transportation of its contents is a nuisance, intensifying the evils it ought to remove. Ventilation of sewers will mitigate but not entirely correct such evils.

4. Conditions sufficient for sanitary security are afforded by the discharge of sewerage at a considerable distance from a town into the sea or into a large and rapid river, whose water, at least for many miles below the exit of the sewers, is not used for drinking.

5. The earth closet method of removing excreta is theoretically and practically satisfactory in a sanitary aspect, the obstacles to its general adoption belonging only to economy and convenience.

Quarantine, With Particular Reference to Cholera and Yellow Fever.—The Public Health Section of the International Medical Congress, after hearing a paper on this subject by Dr. J. M. Woodworth, adopted the following conclusions (*Medical News Library*, October, 1876):

1. The supervision of ocean travel ought to be directed to securing good sanitary condition of vessels at all times out of as well as in port.

2. A system of port sanitation should be adopted and administered for each country or place separately, modified in particular cases by taking into account the liability of the port to infection, the period of incubation of the disease, the length of time consumed in the voyage, and the measures enforced by the vessel in route.

3. In some countries the detention of passengers and crews of ships hailing from infected ports is warranted, but for such time only as is necessary to complete the period of incubation of cholera or yellow fever, counting from the date of departure from an infected port, or landing from an infected vessel, but in no instance should passengers or sailors be held for observation on board an infected vessel, and such vessel should not be detained beyond the period required for inspection and thorough disinfection and cleansing.

4. Recognizing the fact that the modifications of infectuous disease may sometimes elude the most vigilant sanitary supervision of shipping, the importance of wisely directed internal sanitary measures can scarcely be overestimated.

5. So far as America is concerned it is desirable that prompt and authorative information should be had of the shipment of passengers or goods from cholera and yellow fever infected districts, thereby insuring the thorough disinfection of the infected articles.

6. It is believed that the endemic forms of cholera and yellow fever are the fields which give the greatest promise of satisfactory results to well-directed and energetic sanitary measures, and to this end an international sentiment should be awakened so strong as to compel the careless and offending people to employ rational means of prevention.

SURGERY.

THE VIRUS OF VENEREAL SORES—ITS UNITY AND DUALITY.—The Dermatological, etc., Section of the International Congress, after hearing an able paper on the subject by Dr. F. J. Bumshad, adopted the following (*Medical News and Library*):

1. The virus of venereal sores is dual.
2. Venereal sores may be due to the inoculation of the syphilitic virus and also the inoculation of products of simple inflammation.
3. These two poisons may be inoculated simultaneously.
4. The present state of science has demonstrated that suppurating inflammatory lesions resembling chancroids may be produced on various portions of the body by inoculation with simple pus from various lesions.

SYPHILIS—ITS TREATMENT.—The Dermatological Section of the International Medical Congress, after hearing a paper on this subject by Dr. E. L. Keyes, adopted the following conclusions (*Medical News and Library*):

1. Mercury is an antidote to the syphilitic poison, and of service in controlling all its symptoms in all, even the latest stages of the disease, its power over gummata being least. and not to be relied upon.
2. Mercury in minute doses is a tonic.
3. Iodine cures certain symptoms of syphilis, but does not prevent relapses.
4. Mercury long continued uninterruptedly so far as practical in small doses from the time of earliest eruption, constitutes the best treatment of syphilis.

ANTISEPTIC SURGERY.—Dr. John T. Hodgen (*Medical News and Library*, 1876) concludes a paper read before the International Medical Congress, as follows:

1. Putrefaction may and does occur in solids and liquids of the body, both with and without the direct contact of germs borne in the air and water.
2. Putrefaction of the solids and liquids of an open wound may, in many cases, be prevented if the contact of living germs with the surface is not permitted, or by destroying their vitality after contact with it.
3. It is possible that the living solids and liquids of the body may be so altered that they shall not furnish the conditions necessary to putrefaction.
4. Practically the conditions to be met in preventing putrefaction are so difficult, that in many cases it is impossible to comply with them. Yet, even partial success is eminently worthy of our best efforts.

ARTIFICIAL DRUM MEMBRANES.—After discussing the paper of Dr. H. N. Spencer on this subject, the Otological Section of the International Congress adopted the following conclusions (*Medical News and Library*, Sept., 1876): (1) Of the various forms of artificial drum membrane in use, the cotton pellet is preferable, for its greater simplicity and its easier introduction, for the greater uniformity of its effect, and the comparative safety of its employment. (2) It has an advantage over all other forms of artificial drum membrane in that additional to the functional gains which may be derived, there may be added to its value as a means of treating the tympanum, and this therapeutical use of the artificial membrane has a great future in otology. (3) The continued use of the artificial drum membrane as a means of improving the hearing, is indicated in rare conditions, which can only be determined by the aural surgeon.

Editorial.

NOTICE TO CORRESPONDENTS, ETC.—Communications intended for publication, and books for review, should be directed to "Editors of Detroit Review of Medicine, care of E. B. Smith & Co., Detroit."

All remittances of money, all letters on the business of the REVIEW, pertaining to subscriptions or advertisements, should be addressed exclusively to the publishers. E. B. Smith & Co., corner Fort and Griswold Streets, Detroit, Mich.

Original Articles, Reports of Medical Societies, Observations, Correspondence, News, etc., of general interest, are respectfully solicited from every source. Articles should be practical and carefully prepared.

The Editors will not be responsible for statements made over the names of contributors.

MEDICAL SOCIETY REPORTS—THEIR PUBLICATION IN THE SECULAR PAPERS.

THE usual custom has been to have reports from the larger societies, State or national, given to the secular press, while local societies have been forbidden a similar privilege Doubtless, like ourselves, many have inquired, why should this be—this difference between the small and large societies?

Both discuss professional and technical subjects, and are alike in every respect save in magnitude. The local societies do not publish their proceedings in secular papers, because "it is derogatory to the dignity of the profession to invite the attention of individuals affected with a particular disease, or to publish cases and operations in the daily prints, or to suffer such publications to be made;" and because injury is done individuals and the profession by publishing the differences among members of the profession on points of medical ethics and etiquette—differences which cannot be understood or appreciated by general society.

We fail to see in what respect these same reasons do not apply with equal force to the State and national societies. If this be correct, one of two things should be done—either cause the large societies to pursue the same course as the small ones, or permit the small ones to do as the large ones Logically, the societies must either exclude all reporters for the secular papers from their meetings, or permit the local societies to introduce similar reporters into their meetings. The present arrangement is obviously unfair. In which way shall we rectify it? Our own judgment is, that the large societies should adopt the plan which they have prescribed for the smaller ones.

Has not the profession suffered harm from the wide-spread diffusion among the people of its warm debates at our national and State meetings? Unable to understand, from the very nature of things, the questions at issue, the people look with contempt upon what seems to them petty trifling. As an illustration, take the last report of the "Michigan State Medical Society." Reporters from the secular press gave what facts and coloring seemed best to them. Doubtless all were honest and capable reporters. But their business is to make matters readable to the laity, and ridicule of doctors is always readable matter. What was the effect of the publication of their reports? For weeks the secular press was saturated with abuse, intended to bedaub the society and the profession. We are called bigots, fanatics, etc. Now the foundation of all this froth was an ethical controversy, concerning which the laity are as competent judges as between different modes of calculating eclipses, or of computing the cycles of the comets. Had the reporters been excluded, the profession had been spared much of this abuse; only so much as we desired of our discussions would have reached the public ear, and this couched in fitting language. Other illustrations in great numbers could be cited, and will readily be recalled by the reader—all pointing to the one inevitable conclusion, that incalculable harm has resulted from the secular reports of our ethical discussions in the large societies. Such discussions must arise, and although mostly referred to a judicial committee, they still come into such prominence, in a variety of ways, as to give decided coloring to the entire meeting..

If it be wrong, quackish, to publish from a local society an abstract of a paper on syphilis, gonorrhea, or obstructed menstruation, or the pathology, etc., of diphtheria, it must be equally wrong to have it done from a State society.

The objectional custom to which we have directed attention began many years since. The reasons for its origin were doubtless twofold: (1) The convenience of the members in obtaining prompt printed reports of their meetings; (2) the belief that a large society more truly belonged to the public than a small one. Respecting the first of these reasons, we have to say, that latterly all societies have sufficient money to hire proper short-hand reporters, and procure the immediate publication of a properly edited report of each day's proceedings. In short, a little trouble and a little money will give a perfectly accurate and satisfactory report of each day's work, ready for use a few hours after the meeting is held. This plan gives the profession absolute control of their work. Should matter of absolute value to the public be presented to the society, or be developed during its discussions, this could, under the supervision of an appropriate committee or editors, be sent to the secular press.

The second reason for the present custom is, by its very statement, condemned as fallacious. These reasons might have been very proper and powerful when the custom began, but with years the conditions under which medical societies exist and work have undergone remarkable changes. We submit the matter to the sober thought of every lover of the profession, has not the time arrived when a radical change is imperatively demanded? As to the details of the change proposed, they can be arranged by each society for itself. We are sure that a little reflection upon the ills of the present system will convince all who are conversant with the facts that, (1) No reports of medical societies should be published in the secular papers containing matter that pertains to differences respecting medical ethics or etiquette, or to purely technical knowledge, impossible for the laity to understand, and unprofitable to them if understood. (2) The only way practical to prevent the foregoing is to exclude all newspaper reporters and the entire laity from said meetings, as is done by the local societies. (3) To provide for the accurate preparation of its own reports, let each society provide one or more shorthand reporters and an editor of reports. The duties of the first should be to take an accurate and complete record of the meeting, which record the editor should correct and have published by or before the next session, and distributed to the separate members. (4) Should any matter be presented to the society pertaining to public health, capable of being understood by the laity, it could be compiled by a special committee, and published under the sanction of the society.

"GIVE EVERY MAN HIS DUE."

In the August number of the Review, p. 586, we published in our summary of medical news an item in which the following statement occurred: "The entire list of teachers and examiners in the homeopathic college at Ann Arbor, corrected to date, is as follows: Profs. S. H. Douglass, C. L. Ford, A. B. Prescott, Geo. E. Frothingham, Donald McLean, E. S. Dunster, J. N. Langley, Will J. Herdman, Jones (homeo.), Morgan (homeo.), F. A. Rockwell (homeo.), J. G. Gilchrist (homeo)."

The truth of this statement has been called in question by one of the gentlemen mentioned, who hopes to recover $5,000 damages for the injury done thereby to his professional reputation. This gentleman declines to publish, over his own signature, in the columns of the Review any denial of this statement, yet he demands that we publish editorially, under his dictation, a retraction thereof, threatening, otherwise, to bring a suit against the publishers of the Review for libel.

We take pleasure in gratifying the gentleman, by admitting the inexactness of the language above quoted. It is one thing—a heinous offense against professional ethics—to teach in a homeopathic college. It is quite another—a very innocent, nay, a virtuous thing, to instruct homeopathic students, and give them certificates of proficiency, by the aid of which their homeopathic diplomas are obtained. We regret that we overlooked the distinction. Perhaps our mind was in a confused state, as we had come fresh from a perusal of the catalogue (1875–76) of Michigan University. Perhaps our readers might have been led into a similar confusion, reading in the catalogue, without due explanation, the following passages: On page 125, under the head, "Facilities for instruction" in the "Homeopathic Medical College," it is stated that "Students in this college will receive instruction in materia medica and therapeutics from Prof. Jones, and in theory and practice of medicine from Prof. Morgan. To gain instruction in general chemistry, anatomy, organic and applied chemistry, physiology, ophthalmology, otology and practical anatomy, surgery, obstetrics and diseases of women and children, they will attend the lectures on those subjects in the 'Department of Medicine and Surgery.' While in attendance on such lectures they shall be entitled to all the privileges accorded to students in said department." Further, on page 128: "Each professor on whose instruction the student is required to attend will, on the completion of the required course of study, and upon the student's giving the necessary evidence of professional scholarship, furnish such student with a certificate to that effect, and the certificate will be laid before the Board of Regents, who will award the degrees."

Turning to the list of University professors, we find that general chemistry is taught by Prof. S. H. Douglass and Prof. John W. Langley; anatomy by Prof. C. L. Ford and Dr. W. J. Herdman; organic and applied chemistry, by Prof. A. B. Prescott; ophthalmology, otology and practical anatomy, by Prof. George E. Frothingham; surgery, by Prof. Donald McLean; obstetrics and diseases of women and children, by Prof. E. S. Dunster.

From this it is clear that instruction by these gentlemen is a large part of the regular drill of all homeopathic students, and that they are also required to give each homeopathic student, on his fulfillment of the conditions, a certificate of his professional scholarship.

Our readers must not, however, conclude as we did, that Prof. Frothingham and associates are teachers and examiners in the homeopathic college. Our own fallacious reasoning was as follows: If teachers and examiners of the students of said college, then, by any common sense interpretation of facts, they are examiners and teachers in the college. For the sake of argument, suppose that in the course of time the students of the homeopathic college should increase to three or four hundred, while those in the "Department of Medicine and Surgery" should diminish to zero, and suppose that the respective teachers should remain as at present: would any one entertain the conception that Prof. Frothingham and associates were independent of the homeopathic college? Whatever relation they would sustain in such a case they do sustain now.

The sole object of our news item was to chronicle the addition of two new teachers to the homeopathic college, and to recapitulate in the brief-est manner possible the real teachers of the students of said college. After all, we cannot see that we were so far in error; we were speaking of the real working college, and not of the college that has a legal existence on paper. For more than a year professors in the medical department of Michigan University and graduates of said department have been discussing the entire subject through our columns, so that every reader of the REVIEW must know all the facts in their varied relations. Hence our readers could not be greatly misled, knowing, as they did, that we referred to the real working homeopathic college. However, as we have before stated, the columns of the REVIEW have been and are open to Prof. Frothingham and associates on precisely the same terms that they have been accorded to Prof. Sager and numerous graduates of the University, or have been used by ourselves. If he can prove that he does not teach avowed homeopathic students, just as he teaches all other medical students, we shall be glad to give the widest publicity to his proof.

MEMORANDA.

Dr. Simon, late professor of surgery in Heidelberg, is dead.

The International Medical Congress was unable to reach any distinct conclusion respecting the antiseptic method.

The issue of the new edition of "Medical Register and Directory of the United States" has been delayed till December.

In the libel suit brought against the *Boston Medical Journal*, by A. W. K. Newton, a judgment has been given to the defendants.

A photograph of Prof. S. D. Gross is to be inserted as a frontispiece to the volume of the transactions of the late International Medical Congress.

Samuel St. John, M. D., for many years professor of chemistry in the College of Physicians and Surgeons, New York, died September 9, 1876, aged sixty-four.

Dr. A. Mathewson (*Boston Med. Jour.*, October 5, 1876) reports a case of death thirty-seven hours after the administration of ether. Post mortem showed extensive cerebral hemorrhage, induced by the ether and the atheromatous condition of the arteries.

The well known London house of Macmillan & Co., publishers of *The Practitioner*, have undertaken the publication in England of *Micro-Photographs in Histology*, the monthly work conducted by Drs. Seiler, Hunt and Richardson. A large edition is required by the English profession.

Dr. Lancaster, of London has lately analyzed a man weighing 154.4 pounds. He found 23.1 pounds of carbon, 2.2 pounds lime, 22.3 ounces of phosphorus, and about one ounce each of sodium, iron, potassium, magnesium and silicon, 121 pounds oxygen, 15.4 pounds hydrogen, and 52 cubic feet of nitrogen.

A joint meeting of the Toledo Medical Association, the Northwestern Ohio, the Southern Michigan, and Northeastern Indiana district societies will be held in Toledo, November 28th, 29th and 30th. The session will begin at 11 A. M., and be devoted exclusively to the reading and discussion of papers upon medical subjects. From the arrangements made, there is every reason to believe that the gathering will be of unusual interest.

The Governor of Wisconsin has appointed as members of the new State Board of Health the following gentlemen: Dr. O. G. Selden, Reedsburg, one year; Dr. H. P. Strong, Beloit, two years; Dr. J. T. Reeve, Appleton, three years; Gen. James Bintliff, Janesville. four years; Dr. Solon Marks, Milwaukee, five years; Dr. John Favill, Madison, six years; and Dr. E. L. Griffin, Fond du Lac, seven years. At the first meeting of the board Dr. E. L. Griffin was elected president, and Dr. J. T. Reeve, secretary.

The first regular meeting of the Detroit Medical and Library Association was held Wednesday evening, Oct. 18. A very interesting address was given by Prof. S G. Armor, M. D., upon the general topic of "epidemic delusions." We hope to receive a full official report of the meeting for publication. The following are the officers of the association for the ensuing year: President, James A. Brown; vice-president, C. B. Gilbert; secretary, Theo. F. Kerr; treasurer, David Inglis; advisory committee, Jas. A. Brown, A. S. Heaton, E. W. Jenks, H. E. Smith, D. O. Farrand, J. J. Mulheron, H A. Cleland; chairman of section of practice of medicine, A. S. Heaton; physiology, J. G. Johnson; surgery, T. A. McGraw; obstetrics, E. W. Jenks; committee on publication, E. S. Shurly, C. C. Yemans, F. L. Tiffany. J. D. Munson, R. A. Jamieson; committee on library, L. Connor, C. J. Lundy, F. A. Spalding, J. H. Carstens. The membership is already large, and it is expected that every reputable physician will soon become enrolled and engaged in promoting the collective interests of the association.

Book Notices.

Any book noticed herein may be had of E. B. Smith & Co., Publishers and Booksellers, Detroit, Mich.

THE PATHOLOGY AND TREATMENT OF CHILD-BED. By Dr. F. Winckel, formerly professor and director of the gynæcological clinic at the University of Rostock. From the second German edition, with many additional notes. Translated by James R. Chadwick, M. D. Cloth; pages, 284. 1876. Philadelphia: H. C. Lea.

The work before us is really a supplement to the usual works on obstetrics. The only other English work analagous to it is Barker's work on "Puerperal Diseases." Valuable as this is, it is incomplete in many respects. Winckel's work discusses every possible accident or disease incident to the puerperal state. In accordance with the ordinary usage, diseases are classified according to their pathologico-anatomical characteristics.

The discussion of each disease pursues a regular order, viz: anatomical conditions, symptoms, etiology, diagnosis, prognosis and treatment.

Then follows a bibliography of the subject, and one or more cases illustrative of the general statements. As might be expected, the bibliography is more perfect in German works than in those of other languages. The introduction gives a short summary of the objective appearances in healthy lying-in women, of the general etiology of the diseases of child-bed, and the general treatment of these diseases. The remaining part of the work is divided into three sections, the first discussing "Puerperal Affections of the External and Internal Genital Organs," the second, "Puerperal Diseases of the Breast," and the third, "Affections of other Organs Occurring in Connection with Child-bed." In its general features the book is worthy of high commendation. That it will prove both interesting and profitable to all medical students and practitioners who shall study it, we are thoroughly convinced.

As to the value of general blood-letting in the treatment of puerperal inflammations, Winckel concludes that "this treatment is not only unnecessary, but often absolutely injurious." Of the local abstraction of blood he says that it is useful in alleviating pain, in diminishing the stasis in greatly distended capillaries; still, he does not advocate taking the blood directly from the uterus, but indirectly through the inferior epigastric region, by means of leaches. Decided preference is given to the use of ice-bags applied to the abdomen in serious inflammation of the pelvic organs. The sources of external hembrrhages are often difficult to trace. Winckel mentions the following: "Imperfect contraction of the uterus," "Deficient involution," "Changes in the position and form," "Retained portions of the placenta and membranes," "Endometritis," "Granulation on the os," "Mechanical exertions," "Retention of urine," "Constipation," "Rigors." Deficient involution and mechanical exertions were the most frequent of these causes. As regards the frequency of these hemorrhages he found that in thirteen hundred and seventy-five cases they occurred once in twelve. As to the time of occurrence, the majority were after the tenth day. With reference to treatment, uterine hemorrhages in the early days of child-bed are divided into three classes:

1. Hemorrhages from complete absence of contraction.
2. Hemorrhage from irregular contraction of uterus.
3. Hemorrhage from injury to the cervix.

The first two classes of cases will be benefited by internal remedies, the last not at all.

After a brief statement of the latest contributions to the study of infection, he classifies the several forms of puerperal fever as follows:

1. Septicæmia simplex—An infection of the blood by a putrid poison developed in the foul deposit secreted within the genitals. Thus, for instance, in case of a thrombus of the vulva and vagina, sloughing of the

retained portions of the placenta and membranes, gangrene of the uterus, etc.

2. Pyæmia simplex—A blood poisoning attributable to absorption of pus without metastatic deposits, as occurs in parametritis.

8. Pyæmia, sive septico—pyæmia metastatica—suppuration or putrid degeneration of thrombi within the genital organs or in their vicinity with metastatic abscesses in the lungs, liver, spleen, kidneys, and other organs.

4. Diphtheritis simplex genitalium.

5. Diphtheritis metastatica—inflammation induced by monads and bacteria penetrating the organs of generation and the circulatory system.

After a somewhat full statement of all the facts bearing on the etiology of puerperal fever, he concludes that "it originates as an endemic in lying-in establishments by means of a direct transfer of the infectious (purulent, putrid or diphtheritic) matter from one puerperal woman to another, and that the beginning of such endemics may be sometimes referred to a case of spontaneous origin, but frequently also to infection with some one of these morbid matters." "The media of communication of infectious matters are the fingers of the examiners, the instruments that are employed for injections, and the implements and utensils used by nurses and patients."

The notion is rejected which classes obstruction to the flow of milk as a common cause of mastitis. Milk fever is regarded as based on a false conception. The elevation of temperature, which is often met with as accompanying the beginning of the lacteal secretion, is due rather to some inflammation of nipples or genitals, or to the absorption of some putrid matter through abraded surfaces.

A PRACTICAL TREATISE ON DISEASES OF THE EYE. By Robert Brudenell Carter, F. R. C. S., Ophthalmic Surgeon to St. George's Hospital; Hunterian Prof. of Surgery and Pathology to the Royal College of Surgeons of England. Edited, with editions and test-types, by John Green, M. D. 1876. Cloth; pages 500. Philadelphia: Henry C. Lea.

The following sentence from the author's preface concisely and accurately gives the scope of this work, viz: "This book embodies the substance of my lectures at St. George's Hospital, and contains but slight reference to modes of practice of which I am unable to speak from experience."

Although not written for specialists, they will doubtless read it with great interest as the expression of the working thoughts of a fellow worker. But its most attentive and thankful readers will comprise medical students and general practitioners, who, from choice or necessity, desire to qualify themselves for the care of diseases of the eye. Such will find this book unsurpassed by any other in the market. The illustrations, numbering one hundred and twenty-four, are mostly original. The few notes introduced by the American editor, Dr. John Green, contribute much of interest to the American student. The book is divided into fifteen chapters, in the following order: "Anatomy and Physiology of the Eye," "The Ophthalmoscope and its Application," "Principles of Ophthalmic Therapeutics and Surgery," "Diseases of the Eyelids," "Lachrymal Apparatus," "Conjunctiva," "Cornea and Iris, including Irido-choroiditis and Sympathetic Ophthalmia," "Cataract," "Glaucoma," "Diseases of the Fundus Oculi," "Injuries of the Eye," "Squint and Affections of the Ocular Muscles," and "The Use and Selection of Spectacles." The work concludes with a good index. The chapters on the principles of ophthalmic therapeutics and surgery are worthy of the most careful study by the student. Alluding to the tendency of operators to invent new instruments, he says: "The safest man is he who never invented an instrument in his life, but whose daily practice affords evidence that he can use those which have been invented for him by others." The use of ether as an anæsthetic he emphatically endorses, and says that since he adopted the American method of administration in his ophthalmic operations at St. George's Hospital, he has obtained "perfectly satisfactory results as regards the muscles, and without the appearance of any symptom to indicate a possible prejudicial action." Except for occasional use in young children, or as a preliminary to the administration of ether, he has wholly discarded the use of chloroform as an anæsthetic. Basing his opinion on the researches of Dr. Schmid, he believes that the follicular granulations of the conjunctiva are only exaggerations of physiological structure. The prevalence of this follicular hypertrophy in a community affords a delicate test of its sanitary condition. He states that in the English schools are found such conditions as abundantly explain the prevalence of the granulations in a large proportion of the children, viz: inherited diathesis, insufficient and unvaried feeding, overcrowding and imperfect ventilation of school houses, and unwholesome clothing, etc.

In making applications to the conjunctiva, he wisely directs the washing away of the superfluous irritant with a camel's hair brush dipped in water, and the gentle drying of the lid with a bit of lint or a soft pocket handkerchief. This method is an additional labor to the surgeon, but it is very satisfactory to the patient and successful in its results. Dr. Green has inserted an extended note on a method of advancing the external rectus muscle in convergent strabismus, first introduced by Dr. J. F. Noyes, of Detroit.

Compendium of Histology. Twenty-four lectures by Prof. Heinrich Frey. Translated from the German by George R. Cutter, M. D. Cloth; pages 274. 1876. New York: G. P. Putnam's Sons.

The histological works of Frey and Stricker are excellent and exhaustive text-books, but for many students they are too large. To meet the wants of such, this compendium has been prepared. In Germany its sale has been enormous, thus proving that it met an actual want. The text is illustrated by more than two hundred excellent engravings.

Lecture first treats of the protoplasm, the cell and its derivatives. Those accustomed to think histology a dry, impractical study, will read this chapter as a fairy tale. Speaking of the duration of cell life, he says: "Berthold proved that a nail cell lives four months in summer and five in winter. A person dying in his eightieth year has changed his nail two hundred times at least, and the nail appeared such an inanimate, apparently unalterable thing. We consider the nail cell a relatively long-lived constituent of the body. We believe that most of the cells of our body have a much shorter existence. We repeat, however, that it is a matter of belief, for no person can prove it at present, but everything compels the view that, for example, the red corpuscles, of whose multitude we spoke above, have a much shorter existence than the elements of the nails, and they are certainly resembled by many other cell varieties." How do cells die? "Science can give to this at present but an insufficient answer. Certain cells, those of the outer surface of the body and of many mucous membranes, dry up in their old age, the connection with the vicinity dissolves, the thing falls from its bed. The red blood cells die by being dissolved in the blood plasma. Others stick fast in the complicated tissue of the spleen, and are likewise children of death, for the blood corpuscle lives only in the perpetual motion of the current; rest stamps it with the impress of death. Other cells show in their old age granules of lime salts. They mummify. In this condition they may, as cell corpses, possibly remain for a still longer time constituents of the body. Generally, however, they soon afterwards become dissolved. A very disseminated form of death of animal cells in healthy as in unhealthy life is the so-called fat degeneration. In the place of the protoplasma we perceive in increasing quantity molecules of fatty matter. They finally destroy cell life and cell body. The human body daily loses, therefore, immense numbers of living corner-stones."

Lecture second gives the classification of tissues. The plan adopted, while artificial, is such as to present the facts in form convenient for the student. Five classes are made, viz:

1. Tissues of simple cells, with fluid intermediate substance: (*a*) blood; (*b*) lymph; (*c*) chyle.

2. Tissues of simple cells, with scanty, firm, structureless, intermediate substance: (*a*) epithelium; (*b*) nails; (*c*) hair.

3. Tissues of simple or metamorphosed cells, with partly still homogeneous, partly fibrous, and not rarely more firm intermediate substances (connective tissue group): (*a*) cartilage; (*b*) gelatinous tissue and reticular connective substance; (*c*) fat tissue; (*d*) connective tissue; (*e*) bone tissue; (*f*) dentinal tissue.

4. Tissues of metamorphosed, as a rule, unfused cells, with scanty, structureless, intermediate substance: (*a*) enamel tissue; (*b*) lens tissue; (*c*) muscular tissue.

5. Compound tissue: (*a*) vessels; (*b*) glandular tissue; (*c*) nerve tissue.

These tissues are, in regular order, considered in the remaining chapters. We heartily commend this book to every medical student and every person who desires to become acquainted with the rudiments of histology. No student should be allowed to graduate from a medical college until he has mastered at least this amount of histology. The engravings alone are worth the price of the book, while the mechanical appearance sustains the excellent reputation of the publishers.

YELLOW FEVER AND MALARIAL DISEASES. Embracing a history of the epidemics of yellow fever in Texas, etc. By Greensville Dowell, M. D., Professor of Surgery Texas Medical College, etc., etc. Cloth; pages 25. 1876. Philadelphia Medical Publication Office, 115 South Seventh street.

The author tells us that "his sole object is to furnish the profession a rational and more definite mode of diagnosticating yellow fever, and a more successful plan of treating it." His experience in treatment exceeds two thousand cases in hospital and private practice. He endeavors to show by facts thus obtained that the "yellowness of skin in yellow fever is not due to bile but to the hæmatin of the blood exuded through the capillaries and into the intercellular spaces, having more the appearance of a contused wound turning livid or even blue-black. When the fever ends in convalescence, the yellowness gets brighter, until the skin becomes perfectly clear." He endeavors to prove that dengue is much like a mild case of yellow fever, but the fever lasts longer and is much higher than yellow fever, but it *never kills*, treat it as you will. Cold stops both, while intermittents continue indefinitely. No one has a second attack of either. Yellow fever is protean in its types, and changes with epidemical influences. The first six pages give an outline of the disease and the points sought to be established One point could well be applied to the treatment of other diseases, viz: "No nurse should be put in charge of a case who will not implicitly follow the directions of the attending physician." Following a chapter on quarantine are a variety of reports from medical officers, U. S. Marine Hospital service, illustrating the types of the disease, epidemics, etc. The author then records his personal experience, and concludes his work by a short discussion of malarial fevers as they occur in the South. Four plates illustrate the color of the skin, tongue, liver and intestines. A map exhibits at a glance the places, with their elevations above the sea surface, at which yellow fever has existed since 1668. The work will prove specially valuable to those who live in localities where yellow fever is likely to prevail.

NON-EMETIC USE OF IPECACUANHA, WITH A CONTRIBUTION TO THE THERAPEUSIS OF CHOLERA. By Alfred G. Woodhull, M. D., U. S. A. Cloth; pages, 150; 1876. Philadelphia: J. B. Lippincott & Co.

The three divisions of this work are "Clinical Facts," "Therapeutical Opinions," and "A Speculation on Cholera." Briefly stated, the author seeks to prove, by a variety of evidence indicated above, "that ipecacuanha is a direct nervous stimulant, acting chiefly, if not entirely, upon the sympathetic system." Under the head of "Clinical Facts" the author has collected a vast variety of facts, of themselves worth the price of the book. These facts are so presented as to support his thesis. Certainly they will form profitable material for study to one who has accepted the prevailing views respecting ipecacuanha. The chapter on "Therapeutical Opinions" is equally suggestive. The author believes "that dysentery at its inception is the manifestation of a peculiar ganglionic intoxication, and regards the intestinal inflammation, with its consecutive ulceration, as a result of the malady, but not the primary of radical affection." * * "The capillaries, released from nerve control, immediately leak; the glands, with an unbalanced nerve supply, fail either in the quality or the amount of their secretions. The blood supply increases and stagnates in the vascular maze, soon transforming it into a wilderness whose neo-plastic growths, like tares and brambles, add to the desolation." But if at any time before the structural changes set in, the nerve control is reinstated, we then find the congestion removed, the glands properly fulfilling their offices, the capillaries no longer exuding blood and serum, and *pari passu* the abnormal sensations disappearing." That is, the process whose continuance would have developed inflammation, is abruptly aborted. Such a control, he holds, may be exerted by ipecacuanha. The entire book exhibits great industry, careful clinical observation and vigorous thought. We cordially commend it to such of our readers as desire to be posted on its subject matter.

VACCINATION AS A PREVENTIVE OF SMALL-POX. By W. P. Chapman, M. D. Pamphlet; pages, 91. Toledo, Ohio: Brown & Faunce, 115 Summit street. 1876.

This is an elaborate compilation of the facts pertaining to vaccination, and a discussion of the mooted points involved in the operation. The following recommendations are offered as means for the enforcement of vaccination:

(1.) Vaccination should be made by law compulsory. It should be the duty of every physician to see that this law is enforced in his individual practice. This requirement can be as readily complied with upon his part as the giving a certificate of birth or death.

(2.) Revaccination should also be compulsory. In the absence of epidemic influence, a revaccination should be insisted upon at the tenth year, and again some time after puberty, at about the age of twenty. When a community is subjected to epidemic influence, all should be compelled to suffer a revaccination. No positive assurance exists that an individual will not receive the poison of small-pox, until the fact is made known by the reintroduction of the vaccine virus into the system, followed by no development of the cow-pox disease.

(3.) For the enforcement of all sanitary laws the various boards of health should have full authority, with sufficient means to carry out any measure that may be adopted. It is imperative that constant attention be given to all enactments pertaining to the subject of vaccination, as it is believed that in this way only can the idea of Jenner ever be realized, who believed that in vaccination there is an antidote capable of extirpating from the earth a disease that has been considered the severest scourge of the human race.

THEORY OF MEDICAL SCIENCE. By William Dunham, M. D. Cloth; pages 150. 1876. Boston: James Campbell.

The object of this book is, first, to show "that the doctrine of an inherent power in medicine is a fallacy;" and, second, that "the ultimate special properties of vitality and the laws of vital force constitute the fundamental basis of medical philosophy and science." The author defines *physiological action* as vital action in relation to usable material; pathological action as vital action in relation to undigestable, effete and foreign material Medicinal action is a misnomer; it should be medicinal effect. Poisonous action should be poisonous effect. Active principle in medicine should be medicinal portion. Medicinal property should be medicinal relation. Reflex action should be reflex operation. Medicine and poison have no associated power inherent in the substance, nor has the cause of disease. All power which gives motion to vitalized structures is vital power. "The practical science of medicine consists in controlling the instinctive organic power by the use of medicine, as a cause which occasions this power to manifest itself in accordance with the best interests of the individual, when properly prescribed. We are to teach the people that the science of medicine is based on a knowledge of but one law, namely: the law of vital power; that medicine cannot be used scientifically and safely without a knowledge of how this vital force behaves in health and disease—a knowledge whether this vital force is doing the best for our welfare which the case permits, and requires only to be let alone and watched, or whether it requires to be medicated, and how this vital force behaves in relation to the various kinds of medicine." When the people are thus taught, then will the traffickers in inveigled medical powers become as insignificant as one would to-day in pretending to sell the power or force of chemical affinity or the power of gravitation. These extracts will give some idea of the author's conceptions and style.

A MANUAL OF PERCUSSION AND AUSCULTATION IN THE PHYSICAL DIAGNOSIS OF THE DISEASES OF THE LUNGS, HEART AND OF THORACIC ANEURISM. By Austin Flint, M. D. Cloth; pages 250. 1876. Philadelphia: Henry C. Lea.

This book embodies the substance of lessons which the author has for many years given to private classes. It aims to simplify the subject as much as possible, to consider the distinctive characters of the different physical signs as determined by analysis, and as based upon variations in the intensity, pitch and quality of sounds; to impress the fact that the significance of physical signs relates to certain physical conditions; to enforce the necessity of sufficient knowledge of the physical conditions and the signs of health as a *sine qua non* for success in the study of the physical diagnosis of the disease. Of course, there is nothing new in this little work, but as a plain, concise practical teacher of auscultation and percussion as applied to disease of the chest, we do not know its superior. We cordially and heartily commend it to the notice of all medical students and most practitioners.

LECTURES ON FEVER. By William Stockes, M. D., D. C. L., F. R. S., etc. Edited by John W. Moose, M. D., F. K. Q. P., etc. Cloth; pages 864. 1876. Henry C. Lea.

Some of the lectures in this volume were delivered as far back as 1854, others are of later dates. All have been repeated many times year by year to successive classes, and confirmed by constantly renewed observations The lectures contain nothing relating to histological research, the chemico-vital states of the fluids or organs, or the analysis of the laws of crisis. Questions respecting the correlation of essential disease are barely touched upon. As a whole, the book is of interest as a series of reflections on fever, containing much good thinking and practical observation on fever as observed in the Dublin hospitals. To the average medical student it is useless, but to the scholarly or working physician it will be of considerable service.

ON STRICTURE OF THE MALE URETHRA—ITS RADICAL CURE. By Fessenden N. Otis, M. D. Paper; pages 261. 1875. G. P. Putnam's Sons, New York.

Dr. Otis is a firm believer in the curability of urethral stricture, and in this pamphlet he gives his reasons for such belief.

THE CLIMATOTHERAPY OF AND THE AMERICAN MOUNTAIN SANITARIUM FOR CONSUMPTION. By S. E. Chaillé, M. D. Reprinted from the *New Orleans Medical and Surgical Journal*, May, 1876.

After the presentation of some pertinent facts, Dr. Chaillé says that as a general law, high altitudes, wherever found, are exempt from consumption. If the investigator climb high enough, whether the Andes, Sierra Madres, the Rocky Mountains, the Apalacheans, the Alps, the Appennines or the Himalayas, the altitude can be found where consumption is unknown, and where the threatened victim of the low lands can gain such health and prolongation of life as neither doctor nor drugs could secure him. The three important characteristics of mountain climates are the greater purity, dryness and rarefaction of the air. The article closes with a careful description of the only existing American mountain sanitarium, at Asheville, N. C. He vouches for the ability and integrity of its proprietor, Dr. Gleitsmann, and strongly recommends the establishment to those in the first stages of consumption.

AN ADDRESS ON SOME OF THE LEADING PUBLIC HEALTH QUESTIONS, with remarks on the extent of swamp lands in the United States, and their reclamation as a sanitary and economic measure, being the opening address before the American Public Health Association by the president, Dr. J. M. Toner. Paper; pages 40. Reprinted from the transactions of the association.

This address teems with facts and deductions of the highest importance. In his command of, and ability to use, statistical facts pertaining to medicine in any of its branches, Dr. Toner has no superior. As a hygienic measure, this address should be placed in the hands of all legislators.

REPORT OF THE COMMITTEE ON MEDICAL EDUCATION MADE TO THE MEDICAL SOCIETY OF THE STATE OF CALIFORNIA. By James F. Montgomery, M. D. Reprint from transactions, 1876.

It contains nothing new, although much that is true. Its suggestions are, on the whole, wise.

ORTHOPŒDIC SURGERY. By Van S. Lindsley, M. D. Read before the Tennessee State Medical Society, April, 1876.

A compact statement of many points on the above subject.

BOOKS RECEIVED.

Chemistry—general, medical and pharmaceutical. Attfield; seventh edition.

Cyclopædia of the Practice of Medicine. Ziemssen; Vol. VI: Diseases of the Circulatory System.

Gross on Urinary Organs

DETROIT

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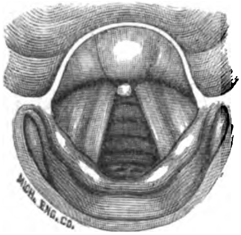
Original Communications.

PAPILLOMA OF THE ANTERIOR COMMISSURE OF VOCAL CORDS—SUCCESSFUL TREATMENT BY EVULSION.

By Dr. E. L. Shurly, Detroit, Mich.

PHILIP F., aet. 35, married five years; farm laborer; uniformly healthy, and of robust appearance, was sent to me by a medical gentleman in March last (1876), for treatment on account of persistent hoarseness. He stated that ten years ago he had contracted syphilis, but was soon cured, and has never since experienced any trouble or illness from it, never having had any sore throat or eruptions of the skin. Lately, on account of irregular eating, has experienced indigestion, more or less. He first noticed hoarseness and a slight sense of suffocation about nine months ago, particularly when the weather was damp, which symptoms have since become constant in attendance, although experienced yet in a much greater degree in a damp atmosphere, and during exercise, the choking sensation, as he terms it, being at times very severe, but probably not amounting to dyspnœa.

Laryngoscopic examination revealed the presence of a polyp about the size of a small pea, pyriform in shape (but somewhat lobed towards the left side) and implanted by a short pedicle just beneath the anterior commissure of the vocal cords. It was visible during inspiration, but most clearly seen during expiration and phonation, when it seemed to be thrown upwards on the vocal cords as they came together. The accompanying wood cut illustrates the laryngoscopic appearance and position of the growth during ordinary respiration, with the throat mirror held nearly perpendicular to the upper plane of the larynx. The diagnosis having been satisfactorily made out, it was decided to adopt that plan of treatment known as evulsion, or crushing, by the introduction of forceps, through the natural way, and the preliminary process of "training" was at once entered upon, but owing to the irritable state of the fauces and stomach, and the very infrequent visits of the patient, little was accomplished in this direction until the following August, when he entered St. Luke's Hospital, and was subjected to good daily training with the mirror and probang. His throat was so rapidly coming under subjection that on the 10th of September last, in the presence of Drs. N. F. Brown and A. F. Merritt, an attempt was made to seize the growth, but with partial success, as only a small portion of the anterior and lateral lobed part was grasped and crushed. As this attempt was followed by some laryngitis, all further operative procedure was delayed for a period of about two weeks, when the superinduced irritation seemed entirely subdued.



From this time on repeated attempts were made with different kinds of forceps to seize the remaining portion of the tumor, but without avail, probably owing to its position and also to the power acquired by the ventricular bands (false cords) of approximating and enclosing the growth from view, until October 8th, when, after the ingestion of a full dose of opium, a pair of forceps with antero-posterior blades were introduced and made to fully grasp the tumor and crush it off. The operation was immediately followed by quite a hemorrhage, which it became necessary to modify by an insufflation of tannin.

The voice, which up to this time had become very husky, was immediately restored to nearly its proper tone and smoothness. The growth was gelatinoid, and easily broken up. Subsequent laryngoscopic examination failed to discover any portion of the growth remaining.

The laryngitis following this operation was very mild, and passed off entirely in a few days, leaving the patient's larynx as nearly as possible in a normal condition. It will be interesting to state that during the long period of training many articles were administered to aid in reducing the extreme irritability of the fauces and stomach which the case presented, such as the bromides, tannin (locally), pepsine, chloroform (by inhalation), chloral, quinine, bismuth and opium, but only the two latter deserve any credit for assisting.

An interesting question presents itself in this case regarding the causal relation, if any, existing between the previous syphilitic infection and the growth itself. The great length of time elapsing between the former event and the consciousness of any laryngeal affection would seem to negative such a proposition, unless it were possible for the growth to have existed a long time in such a diminutive state as not to interfere with the function of the surrounding laryngeal structures. The case also illustrates the difficulty experienced and perseverance required in reaching growths situated in the region of the anterior commissure of the vocal cords. Dr. Mackenzie, in his work, "On Laryngeal Growths," reports an almost analogous case (No. XXIV), in which, after repeated attempts, he was unable to remove the whole of a growth from this situation.

CLINICAL CASES IN PRIVATE PRACTICE.

By C. H. Tidd, M. D., Geneva, Iowa.

Case 1.—*Melæna Neonatorum.*—On the evening of the 30th day of August was called to attend Mrs. B. in confinement, who, after a somewhat prolonged and tedious labor, was delivered, about 5 A. M. of the 31st, of a large, well developed, and apparently healthy female child, which weighed eight and three-quarters pounds. Upon severing the cord (which was very tender and quite flat) I noticed that the few drops of blood which escaped were very dark, almost black, differing in this regard from anything I had ever observed before, and upon examining the placenta, I found it to be of much darker color than normal, and apparently broken down, but as the child appeared healthy, and the meconium (which passed while the child was being washed) appeared natural, I thought but little more of the peculiarities above mentioned, and even now am not certain that they bore any relation to the disease which was afterwards developed, yet am inclined to believe that it was in a measure dependent upon the condition of the placenta, in that the system was weakened through the "*necessarily*" impure blood with which it was supplied. I left the house about 8 A. M., and heard nothing more from the child until about 4 P. M. of September 1st, when a messenger from Mr. B. announced that the *child* was quite sick, suffering (as he expressed it) with something like *bloody flux*. Upon reaching the house, at about 6 P. M., I found the babe almost in a state of collapse—face very pale, lips blue, extremities cold, pulse weak and rapid, being scarcely perceptible, respiration slow and labored, and abdomen quite flat and sunken. By inquiry I learned that about noon (thirty-one hours after birth) the child had passed a small quantity of fluid blood, which alarmed the parents, but as the child did not seem ill, they had delayed sending for help until it had three passages of like character as the first. Soon after my arrival it had another bloody discharge from the bowels, but this, unlike the previous ones, seemed to be coagulated, the lumps appearing about the size of a large hazel-nut, and appeared to pass away without any effort whatever on the part of the child. Here was a case unlike any I had ever met, and two plans of treatment immediately presented themselves to my mind, viz., with cold, as we would treat most cases of internal hemorrhage; or with warm applications outwardly (which seemed to be demanded by the condition of the child), either course to be combined with such agents internally as are known to control hemorrhage. It was evident that what *was done* must be done quickly, and I decided upon the latter plan, as being (to my mind) the most rational, and accordingly directed a fire to be lighted in the room, so that the temperature should be at about 70° F., and in connection with this I had bottles filled with warm water, and placed around the child, to be kept there until it should become warm. While this was being done I prepared the following:

℞. Fl. ext. ergotæ .... f. ʒiij.
  Liq. ferri sub sulphatis .... f. ʒss.
Misc.

of which it was to have three drops every half hour, until the bloody discharges should cease. After administering one dose of the above, and seeing that the other directions had been carried out, I left, promising to return by midnight, or soon after. I have no hesitancy in admitting that the *one great object* I had in going home was to *read up* my case, and decide upon a line of treatment, the nearest consulting physician being ten miles away. Upon reaching home and looking up my authorities I became convinced that my diagnosis, "melœna neonatorum," was correct; but I was *not* convinced as to what treatment was best, for I found that some authorities, among whom is Relliet, advocate iced milk and cold applications to the abdomen, while Vogel and others recommend about the plan I had pursued, and each sustains his position with plausible arguments. As I had already instituted a line of treatment which was supported by *good* authority, I could not prevail upon myself to change for another, directly opposite, though it seemed to be rational and equally well supported, consequently I decided to follow out the line of treatment already commenced, and returned to the patient, reaching there about 12:30 A. M., September 2d, found but little change in its appearance, save that its surface seemed warmer. It had had *three* discharges of blood since I left, which were of the same nature as the one last spoken of, viz., "coagulated." I directed the treatment continued as before, and the medicine increased to four drops at each dose. Shortly after this I lay down, with directions to be called at six o'clock, unless it should be deemed necessary to call me before. At 6 A. M. found the child about as at 2 o'clock. Bowels had moved three times, but discharges were not so copious and coagula larger and firmer, owing probably to the action of the iron. Treatment continued, with directions to have the child put to the breast at least once in *two hours.*

6 P. M.—Seems much better; extremities and surface of body warm and somewhat moist, color of face and lips normal, pulse slower and stronger; bowels have moved but twice since 6 A. M. Treatment continued, save that warm flannels were substituted for the bottles, with directions to replace the latter, should it be found necessary.

Sept. 3, 8 A. M.—Child still improving, nurses well, color natural, pulse good; bowels moved but once during the night, and, although the discharge looked very dark, it did not seem to contain much blood. Reduced the dose of the medicine to two drops every two hours, child to be kept warm and nursed regularly.

Sept. 4th–6th.—Child still improving; bowels moving from two to four times each twenty-four hours; passages still very dark-colored and rather offensive. Discontinued the ergot and iron, and gave gr. ss salicin every four hours. From this time improvement was rapid, and the child is now prospering well. From the success attending the treatment of this case I am convinced that the more rational treatment of "intestinal hemorrhage" of the new-born infant is to induce as strong a turgescence as possible toward the integument, which is best accomplished by a high temperature, although it is quite probable that the treatment by means of *cold*, so strongly advocated by Rilliet and others, would in many cases control the disease.

CASE 2.—*Puerperal Convulsions.*—Mrs. W., aged 20, was confined with her first child on the 22d of August last. The waters broke about 3 P. M., and I was sent for, and arrived about 5:30 P. M. I found the os but slightly dilated, yet dilatable; delivery occurred in about three hours. Nothing untoward supervened until after the child was washed and dressed, probably an hour after delivery, when she complained of a sharp headache, and upon examination I found that her feet and limbs were quite œdematous, and her skin of a waxy color. Taking into consideration the external signs of uræmia and the severe headache, visions of convulsions began to flit through my brain, but, after administering about forty grains of bromide of potassium, and applying cold to the head, I was highly gratified to hear her express herself as feeling much better, and I flattered myself that my fears were without real foundation. I left her about 11:30, promising to return the next day. About 4 A. M., August 23d, I was summoned to her side in great haste, the messenger informing me that she was having *fits*, having had *two* before *he* left. I found her completely unconscious and unable to swallow. I had not been with her more than ten minutes when she was again seized with a terrible convulsion. I at once took a pint cup full of blood from her arm, but with no perceivable benefit. I then began the administration of chloroform by inhalation, keeping it up cautiously for about thirty minutes, when she was seized with another convulsion, much harder and of longer duration than any of the others had been. I reopened the vein in her arm and drew away another cup full of blood. Still the convulsions continued, recurring about every twenty-five to thirty minutes. I then sent to Hampton for counsel, continuing the administration of chloroform and the application of cold to the head until the return of the messenger, who reported that he could not find either of the three physicians of the place at home—one being in Wisconsin, the others being absent professionally. I therefore determined to draw more blood, and accordingly opened a vein in the other arm, and drew another pint of blood, followed by inhalations of chloroform, but without effect, the convulsions returning with *unwelcome* regularity, the veins of the neck continuing largely distended. Two more convulsions were witnessed, and the case seemed desperate—in fact, had long seemed so to me, and I may add, by way of parenthesis, that the numerous questions of the husband, and the crying of the women present did little towards encouraging me. I decided to risk drawing more blood (although it seemed hazardous). I reopened the vein and allowed nearly another cup-full to pass away. At this juncture she showed slight signs of consciousness, the first since about 3 A. M., it being now nearly 12 o'clock M. By inhalations of chloroform I was now able to keep the convulsions under control, she only having two more, and they very slight, the last one hardly meriting the name when compared with some of the others. From this time she had no symptoms of a recurrence. About 3 P. M. I gave her about ten grains of calomel, following this in about an hour with a solution of cream of tartar, jalap, tartarized antimony, and fl. ext. buchu, to operate upon the kidneys and bowels, and control the heart's action. She had three or four passages from the bowels, and passed water twice in bed, but did not return to full consciousness until about nine o'clock that evening, about eighteen hours from the time of the attack. She was afterward kept upon tonics, with a supporting diet, and the secretions carefully watched. She made a rapid recovery, getting up about as soon as ladies usually do. She had in all, as nearly as we could estimate, nineteen convulsions, including the two last, which were very light. On the Saturday following (August 26) I was called to see a lady living about two miles northwest of the first one reported, who had been attended in her confinement by a midwife, but had been seized with convulsions shortly after delivery. I found her in much the same condition as was Mrs. W. when I reached her. I immediately opened a vein in her arm, and drew away a quart basin brimming full of blood. Then began the administration of chloroform by inhalation, and was happily able to control the convulsions without the further abstraction of blood. The after-treatment in this case was similar to that used in the first. She also made a good and rapid recovery. At the next meeting of our county medical society, which was held on Tuesday, September 5th, Dr. Hutchins, of Hampton, seven miles north of this place, and Hurd, of Chapin, seven miles north of Hampton, each reported two cases of puerperal convulsions which had occurred in their practice during the past month, and which, by a strange coincidence were almost in a line with my cases, running from southeast to northwest, and that the belt of country in which all of these cases occurred was not over three-quarters of a mile in width east and west. Was this merely a coincidence? or was it owing to some other influence as yet unknown?

CASE 3.—*Obstipation of the Bowels.*—Was called Monday evening, October 9th, to see Georgie Tucker, æt. 9, who his father said was suffering with *colic*, which they had failed to relieve with domestic remedies. Found him suffering intensely, abdomen tympanitic, respiration hurried, pulse 120, temperature of body about 102° F. Upon inquiry I elicited the following history of the case: On the Friday previous he had been out on the prairie with his father, and, boy-like, had picked and eaten a quantity of the buds which grow on the wild rose bushes, which are found in great numbers on the prairies. He could not tell how many he had eaten, but said "he ate a pocketful, and some more besides." Suspecting that these were the cause of the trouble, I gave him a careful examination, and found that in the ileo-cœcal region I could detect a round, hard, inelastic tumor, the size of a large orange. Here, then, was the explanation of all the trouble, and how to get rid of it was the all-important question. I gave him an injection of warm water, and succeeded in getting a free evacuation of the rectum, and probably the descending portion of the colon, but the tumor was not diminished in size a particle. I repeated the injection, but after throwing up about a pint of water, the pain became so intense that I was forced to desist. That it was merely a case of obstipation, and not of intussusception that I had to deal with I was convinced from the fact that the evacuations that I had obtained were merely the contents of the large intestines, and contained neither blood nor mucus, so important factors in the diagnosis of intussusception. Having (as I said) been obliged to discontinue the injections on account of the pain, I gave him a powder containing one-quarter grain elateriun, and ten grains each bi-carb. soda and jalap, and left four more of the same kind, with directions to give one every three hours until the bowels should move, or until my return in the morning.

October 10.—Found the patient still in great pain, with other conditions about as yesterday. Again attempted to use the syringe, but was forced to desist, on account of the intense agony which it caused. Hoping (almost against hope) to soften the mass and cause its removal, I left more powders, similar to the first, with a solution of chloral hydrate, to be given often enough to allay the pain and produce sleep, and promised to see him again that evening.

8 P. M.—Found but little change, and that not in our favor. The medicine had been retained (alas, too well) no sign of an evacuation being manifest; tympanitis present, but increased; tenderness over the whole abdominal region well marked, yet no positive signs of peritonitis. At this juncture I gave him ol. tiglii gtts. 3, which caused free emesis in about twenty minutes, but seemed to have no other effect. I had resolved upon my return to try Prof. Mosler's plan of irrigating the bowels with water in case the other treatment should fail, and I had very little hopes of its doing otherwise, at least no well grounded hopes. Accordingly I administered a full dose of morphia, so that I would be able to manipulate my patient without causing extreme suffering, and, waiting until he should have passed under the influence of the medicine, and finding no indications for the use of the catheter, I had cloths wrung out of warm water applied constantly to the abdomen, until the tenderness was relieved. I procured about two quarts of warm water and some castile soap, and made a good suds. In absence of an olive-shaped tip made expressly for such use, I devised one out of a piece of pine, making a hole through it of the same size as the rubber tubing that I was about to use. The tip was adjusted at one end of the rubber tube, about four feet in length, and a funnel inserted at the opposite end. All things being in readiness, the tip was inserted in the anus, and the entire quantity of water gradually poured into the funnel, the *force* of the stream being regulated by raising and lowering the funnel, and occasionally diminishing the calibre of the tube by compressing it with my fingers and thumb. By placing my hand on the abdomen I could trace the progress of the water until it reached the *mass*, when it stopped, and, to use a homely expression, merely backed up. As soon as the entire quantity of water had passed, I removed the tip, and by my hands retained the water in the bowels for several minutes, when I allowed it to escape. It presented a slight fecal odor, but no fecal matter escaped. After waiting about an hour, I again introduced the tip and passed up another half a gallon of water, retaining it as before. When I allowed this to escape, I noticed that it contained a small quantity of softened fecal matter, and I thought that I could notice that the *mass* appeared somewhat softer. Reapplying the clothes wrung out of hot water, I waited nearly another hour, and again repeated the irrigation, using this time nearly three quarts of water. During the introduction of *this* I was compelled to desist several times on account of the increased pain which it caused, but by carefully controlling its introduction, I was enabled to pass the entire quantity of water into the bowels. This was retained somewhat longer than either of the others, and when allowed to escape, there came away a large quantity of fecal matter in scybalous masses, looking as though they might have been broken from the mass. Making the surroundings of the patient as comfortable as possible, I determined to wait two or three hours at least, before again using the water, in order to allow him time to rest. Scarcely had we got him comfortably in bed, when he gave notice that his bowels were again going to move, and before we could get him on the chamber, the "avalanche," as it were, was upon us. The feces was of a semi-liquid character, and the amount that passed seemed almost incredible—indeed, it seems yet hardly possible that the bowels could contain so much. This was followed by a discharge of *flatus*, that seemed to me to be the most delightful sound I had ever heard, as it was evidence that our labors had been rewarded with entire success, and that we had now established free circulation along the entire tract of the bowels. Upon examining the matter discharged, I found an immense quantity of seeds and husks of the berries that had been eaten, in an undigested state, which proved clearly that they had been the cause of all the difficulty. Directing that the patient should have light nourishing food, such as broths, beef tea, gruel, etc., and be allowed to rest all that he could, I left him for the day. On calling the next evening, I found that he had had a natural passage, and that the pain and tenderness over the abdomen had entirely disappeared. From this time his recovery was rapid and complete.

With the light which the results in this case affords, I think that I shall never again be guilty of wasting *valuable time* in the administration of cathartics in a similar case, but shall at once proceed to irrigate the bowels, using such quantity of water as the condition of the case will admit, and if I am firmly convinced (and with our present light in diagnosis we can be pretty certain), that I have not a case of intussusception, shall have no fears of doing any damage, even though a great quantity of water be used each time, and Prof. Mosler as well as others who have given this subject much study, and have investigated it thoroughly, have clearly proven that we can force a continuous stream of water—and in a very few minutes—through the whole length of the colon up to the ileo-cocal valve, irrigating and washing its whole tract. This will be apparent to any who will take the trouble to try the experiment of forcing water through or into any receptacle by means of tubes with the distal extremity elevated.

CASE 4.—*Two Births within Ten Months; the Shortest Time on Record.*—On Sunday, December 5, 1875, Mrs. M., living four miles west of this place, was delivered of a male child at full term. On Thursday, September 14, 1876, she was again delivered of a large, well developed male child, weighing seven and one-fourth pounds, which she claims and which has every appearance of having gone to full term, and I may add that the child was born within three days of the time that she had claimed it ought to be, counting from the time and, as she claims, the *only time* she had sexual intercourse with her husband after the birth of her child until she was over two months advanced in her second pregnancy, she fixing the date from the fact that her husband left home for a two months' absence the morning of the *tenth* day after her confinement, he soliciting, and she consenting, to a " congress " the evening before. Her first child never nursed at the breast, the extreme smallness of her nipples preventing, nor did she at any time seem to have much milk—indeed, not enough to give her any trouble. This second child was born in just 284 days from the date of the birth of the first. In this case, how are we to account for the absence of " degeneration " of the womb substance, as is described by Drs. Hamilton, Heschl, Retzius and others?

Apropos to this, I would give some notes of a case occurring in my practice some two years ago. A Mrs. Saul, of Clifton, W. Va., expected to be confined about the 1st of June, and my attendance was requested. The time came and passed, and as I heard nothing more of the case, I supposed that they had procured the services of another, and dismissed the case partially from my mind. On the evening of July 30th, as I was passing the house, the husband hailed me, asking me to go in and see his wife who, he said, was becoming alarmed at having gone so long past the time of her expected confinement. Upon inquiry I learned that she had quickened and felt the motions of the child the last of December previous, and this statement was confirmed by her mother and husband, whose attention had been called to it by the active movements of the child, they fixing the dates by the holidays, and the fact that *he* was not at work. Carefully examining the lady, I could find no cause for uneasiness, and supposing that they *must* necessarially be mistaken as to dates, I recommended patience, assuring them that at a proper time "all would be well." August and half of September passed, and she was not confined until the evening of September 15th. Is it possible for a fœtus to remain in utero thirteen months, or nine months after quickening, or were all mistaken as to the nature of the motions felt?

OPHTHALMIC CASES.

By Eugene Smith, M. D., 95 Fort street West, Detroit.

Among the many subjects of interest to the general practitioner, brought to light by the specialist in ophthalmology, perhaps none is more so than the peuliar form of visual trouble so frequently accompanying Bright's disease. It is so characteristic, and the changes observed with the ophthalmoscope so constant and *typical*, that we are always able to diagnose the *general affection* by the peculiar appearance of the optic disc and retina, and we have several times done so before there has been even a *suspicion* of *renal* disease.

July 27th, Mr. J. H., of Almont, consulted me about failing vision of the right eye. Ophthalmoscopic examination revealed the peculiar localization and grouping of the retinal changes so typical of albuminuria. Although the left eye was not complained of, slight changes were discovered in the fundus. He had not complained of kidney trouble, and the first intimation he had of his danger was given by the examination with the ophthalmoscope. He returned to his home, and died within two months of the time I was consulted.

October 18th I had the opportunity to show the members of the Detroit Medical and Library Association a case of this character, which had been examined and treated for a short time by a well-known gentleman, who, to judge from his treatment, failed to make a diagnosis.

The case was so typical that I took him before the society, each member of which was enabled, with my demonstrating ophthalmoscope, to see the changes in the disc, and yellow spot. The disease of the kidneys was *unsuspected.* The left ventricle of the heart, in this case, was enlarged. In these cases no *special* treatment is required for the affection of vision, the treatment for the general condition being all that is advisable. I have never seen a case become totally blind. As a rule, the renal disease takes the patient off before total blindness ensues. A recent author says: "The frequent co-existence of the two conditions should lead every medical man, even if he does not use the ophthalmoscope, to examine the urine for albumen in every case in which defective sight is complained of." This idea I most heartily endorse.

About a year ago I extracted a hard cataract from the right eye of a Mrs. F——, aged 64, by Graefe's method. The operation was perfect, the lens came out *en masse,* and the healing was normal. No trouble followed the operation. Four weeks after the operation, the patient with +4½, could read part of No. XX of Snellen, at 15 feet, and with +2, read 2½ of Snellen at 8 inches.

Two months later she visited me, complaining of a "cloud before the eye, and that she could not see to read as well as shortly after the operation." Examining the eye I discovered in the pupil a *striated* opacity which I pronounced capsular, and informed her that I should, after a while, have to make a little opening in it which I thought would raise the visual power again. Some months later, April 2d, she again visited me, being at this time hardly able to walk alone in the streets, vision having steadily but slowly grown worse. I again examined the eye, and found the opacity much thicker, still having the peculiar striated or star-like appearance, and with the ophthalmoscope looking *exactly like an incipient cataract*—so much so that I remarked to my patient, "if I had not myself removed the lens I should pronounce her trouble lenticular cataract."

The following day I attempted discission with a sickle-shaped needle, by oblique illumination. The needle entered the opacity as if it was a *thick* body, and the whole opacity moved with the needle, but did not cut or tear. I pricked it at several points, but with the same result. I was about to put in another needle, after the method of Bowman, but the patient urged me to wait a few days, as she felt hardly equal to the task. I did so.

The next day I called to see her, and found the pupil and about one-tenth of the anterior chamber filled with a *swollen mass*, which looked exactly like swollen lens substance. The pupillary edge of the iris was pushed forward, and the eye was slightly irritated. I applied solution atropia, 4 grs. ad ℥j. April 5th the greyish white mass had slightly *increased* in size, but its edge was growing thinner. A few days after the mass had entirely absorbed, and the patient *could again see to read as well as after the extraction*, viz., $s=\frac{15}{20}$. No. 2½ of Snellen at 8 inches, with +2. Striated opacity had entirely disappeared.

The question naturally arises, was this a case of regeneration of lens matter, or a reunion of the capsular flaps and arrest of the absorption of cortical substance spoken of by Wecker in his "Traitê Pratique des Maladies des Yeux," volume 2, 2d edition, page 147, or an iritic exudation from insidious iritis? With regard to the Wecker's theory, I will state that there was no debris left in the eye.

I am skeptical about the regeneration of lens tissue, yet this seems the most plausible theory in the above case.

Whooping Cough Treated by Etherization.—Dr. S. D. Powell (*Journal of Nervous Diseases*, April, 1876) reports five cases of whooping cough apparently cured by etherization for from fifteen to twenty minutes. In most cases one etherization sufficed.

A PECULIAR CASE OF SURGERY.

By Theodore A. McGraw, M. D., Prof. of Surgery in the Detroit Medical College.

On May 22d I was called by Dr. Thomas, a dentist of Detroit, to see a patient whose disease had a peculiar history. Two months before she had consulted a dentist of this city about a right lower wisdom tooth which was causing pain and trouble. She was twenty years of age, and the tooth had made its appearance but a short time before. The dentist advised its extraction, and attempted to accomplish it by pushing an elevator between it and the next molar, using the latter as a fulcrum. The effort seemed to succeed, and he said to her, "Your tooth is out, spit it out." She could not find it, however, in her mouth, was confident she had not swallowed it, and the floor was searched for it in vain. It had disappeared from its socket, but its present whereabouts could not be determined. The muscles of the jaw began almost immediately to contract, the jaw became set, and the face swollen. For three weeks the dentist endeavored in vain to relieve this condition. She then consulted Dr. Thomas. He found the second molar tooth loose and extracted it. Passing his finger into the mouth he was then able to feel the empty socket of the wisdom tooth next to it. For the next five weeks he contented himself with using means to combat the inflammation, and to relieve the muscular anchylosis, by which the jaw was kept closed. He had so far succeeded, that when I saw her she could receive the thickness of two fingers between her teeth, and an examination of the jaw was both practicable and easy. There was evidently suppuration at the angle of the jaw and around the alveolar process of the extracted wisdom tooth. She was given ether, and the mucous membrane cut away from the spot. The outer rim of the alveolar process was found necrosed, and was cut away. I then felt a sharp, movable bony substance projecting from the inside of the jaw. It was extracted with great difficulty by Dr. Thomas, and was found to be the lost tooth. It had been driven by the elevator upwards out of its socket under the mucous membrane, and between the internal pterygoid muscle and the jaw, and was there firmly retained in its position, with the crown upwards. The patient is thus far doing well, and bids fair to make a complete recovery.

ELEVEN POUND OF BABIES FROM A VERY SMALL MOTHER.

By Robert Beatty, M. D., Rome, Ga.

THE patient, Mrs. Blanque, is twenty years of age, and has been married three years. She is well formed, but quite diminutive in size, her height being four feet eleven inches, and her weight seventy-five pounds. Twenty-two months ago she passed through her first labor, in Boston, quite successfully, though the labor is represented to have been a little tedious and severe, requiring the use of ether to render it bearable. Her convalescence was rather protracted. In this, her second confinement, the duration of the labor has been but an hour and a half; she has borne twins, the first presenting in the left occipito-anterior position, and the second in R. O. A. position. The placenta followed naturally and without undue delay, the uterus contracted firmly, and there was no hemorrhage. The patient has required nothing save a gentle purgative, and at night a dose of potassic bromide to secure rest. The flow of milk is abundant.

The children are girls; they are plump and well nourished, and promise well for the future. Their combined weight is eleven pounds, which is equally distributed between the two.

Abstracts from Virchow's Archives.

Prepared for the REVIEW by H. P. V. Petershausen, A. M., M. D., Ph. D.

XXII.—Deciduomata—Tumors with the Structure of the Decidua.

(By Prof. Rudolf Maier, of Freiburg. Vol. 67. May, 1876.)

The author has examined two tumors that were sent to him, with the history of each case, by the attending physician, which proved to have the structure of the decidua tissue. Both had grown from the mucous membrane covering the cavity of the uterus. Their structure resembles very much, as far as could be ascertained, that of the decidua in its earlier period. The walls of their alveolar spaces, and the contents of the latter, consist mainly of decidua cells. The connective tissue does not form a considerable part of the hyperplasia. The blood vessels have a share in the new formation similar to that of the connective tissue. They mostly appear in that part of the tumor by which this is connected to the uterus wall. One of the tumors was tuberous, the other flat.

It appears that gestation or catamenial irritation favors the development of the growth. The importance they may obtain depends upon their loose or more intimate connection with the uterus. They will, under circumstances, *even cause* a disturbance of pregnancy. This was observed in one of the cases, where a still-birth, in the sixth month, took place after the tumors were born. Until this event had occurred, it was thought that a placenta prævia might probably cause the premature birth. The other case was detected by frequent hemorrhage from the uterus, which led to a careful examination of this organ.

XXIII.—On the Physiology of the Milk Secretion. (Dr. E. Roehrig, of Freiburg. Vol. 67. May, 1876.)

It is an established fact, that the specific elements of milk are formed from the epithelium of mammary glands. The dissolved and transformed protoplasma of the epithelium, mixed with the transudation of the blood, is milk. But there is very little known of the physical agents which cause and influence the secretory activity of the gland. Most observers have attributed the principal influence upon the secretion to the nervous system, though no special nerves were known which might act upon the glands. No researches had been made pertaining to the question, whether changes of pressure in the circulatory system have any influence upon the secretion of milk. The author, who became interested in this matter, arrived at the following results, from a number of carefully made experiments:

The existence of specific secretory nerves is very improbable. There must only be recognized in the breast: (1) Sensory reflectory nerves. (2) Motor nerves, of which some cause the erection of the nipple, while others act upon the contractible elements of the milk ducts. (3) Vasomoter nerves, which influence the caliber of the vessels. The latter are in relation with the secretion of milk. As soon as they are cut the arteries become dilated, on account of which more blood is carried to the capillary vessels of the breast, and, consequently, filters into the alveoles, which then take up the more solid parts that constitute the milk.

The doctor found further, that the degree of pressure determines the secretion to a certain degree. Now, strychninized blood acts as a powerful stimulant upon the vasomotor centers, in consequence of which the smaller peripheric arteries contract, and the blood pressure increases largely. By these facts the author was induced to study the action of injected strychnine upon the secretion of milk, and observed, about thirty-five minutes after the injection, there was secreted sixteen times more milk than usual. But after a while the function of the gland decreased rapidly. The secretion of milk becomes likewise more active by digitaline and caffeïn, yet the strongest action upon the glands is that of jaborandi. Reverse to the action of these remedies is that of chloral, which was expected beforehand, on account of the fact that it diminishes the pressure in the blood vessels. These results may give some indications for gynecological practice, especially in case of galactorrhœa and agalactia.

XXIV.—On the Effect upon the Secretion of the Kidneys of the Irritation of the Skin. (A. V. Wolkenstein, of Petersburg. Vol. 67. July, 1876.

We observe, in the course of many diseases, that the function of the kidneys becomes impaired by an irritation of the skin. To explain this the doctor examined what effect would be produced by a number of irritants when applied to the skin of rabbits. He arrived at the following result: The action of different irritants is not a constant one. *Slight* irritations (by tinct. podï, ungu. ciner., sol. of tart. stib.) cause only albuminuria of a lower degree, disappearing when the cause ceases to act. No changes in the kidneys are to be found in this case. When *stronger* means are applied (strong acids and caustics, moxas, etc.), there is found in the urine albumen, epithelial cells from the uriniferous canals, and sometimes cylinders. Pathological changes in the kidneys were always noticed in these cases. The kidneys were enlarged, and the uriniferous canals were filled by disintegrated epithelial cells. The animals had expired with cramps.

In all cases of irritation of the skin, the following phenomena were observed: The temperature increased and remained stationary for the time that albumen was found in the urine; the number of pulses and respirations was increased; appetite and thirst were lost, and the quantity of urine became less; there was more urea produced, while a lesser quantity of the chlorides was found; the weight of the body decreased; besides, there was noticed inflammatory re-action of the skin, infiltration of the subcutaneous tissue, etc.

The author explains the effect of the skin irritants in the following manner: The transudation of serum-albumen into the uriniferous canals depends either upon an *increased* pressure of the blood, or upon *changes in* the walls of the vessels. Sometimes it is caused by a combination of both. When cantharides becomes absorbed by the skin it gets into circulation, and on being eliminated it produces albuminuria, in consequence of its action upon the vessels. Iodine acts in the same manner, as was found by many observers. The acids must likewise act in a similar manner. Though ungu. ciner. also becomes absorbed and circulates as albuminate in the blood, it remains there for a longer period, and was probably not yet eliminated when the doctor searched in vain for albumen. No doubt the other irritants must cause albuminuria, for the reason that their application was followed by fever, constantly bringing forth a morbid state of the parenchyma. Lastly, it must be mentioned, that albuminuria may also be caused by a disintegration of red blood corpuscles.

Being under the impression that the nerves of the skin exclusively become irritated by an application of the electric brush, the author performed some new experiments. He irritated always about three square inches of the skin by the brush. This was followed: (1) by an increase of temperature and a greater frequency of the pulse; (2) by an increase in quantity of urine and urea, and by a decrease of the chlorides; (3) by albuminuria, which was noticed for some hours, and even for a day or more in case the irritation had lasted for a longer period. The kidneys were found under this circumstance to be enlarged, and filled with venous blood.

XXV.—Mycosis of the Brain, Dr. H. Schuele. Vol. 67. June, 1876.

An idiot, who had already been for years confined to an insane hospital, but who had been healthy in every other respect, became suddenly attacked with erysipelas. Above the root of his nose there appeared a swelling, which soon spread over both eyelids and the forehead. Then pus accumulated under the swollen parts, and the scalp became œdematous. At the same time pulse and temperature increased, and the patient became soporous. When under this state an abscess above the left upper eyelid was opened, and a large quantity of brownish matter escaped. The patient expired about two days afterwards.

The post-mortem examination revealed the existence of small softened portions in the lentiform body of the brain. The vessels within their reach were changed, mostly dilated, and filled with numerous very small opaque corpuscles. Their diameter is only one-tenth of that of the blood corpuscles. On close examination they proved to be minute vegetable organisms. The doctor thinks that they came from the inflamed skin to the affected part of the brain by way of the vessels that supply the pons Varolii, and of the spaces in the connective tissue of the pia. The invasion was probably caused by the habit of the patient of rubbing his nose with paper which was bedaubed by suspicious substances.

XXVI.—Functions of the Corpora Quadrigemina. (Dr. Kohts, of Strassburg. Vol. 67, August, 1876.)

The author describes an interesting case of the destruction of the posterior part of the corpora quadrigemina. As there are only a few similar cases on record, he made a number of experiments with animals of different orders, to throw more light upon the disease in question. The case was as follows: A boy of seven years had been sick for a long period. The first part of his illness embraces about ten months, during which the disease showed the symptoms of a spinal affection. He staggered when attempting to walk, had strabismus divergens alternans (indicating a paresis of both nervi oculomotorii), and sometimes affections of the bladder, but no pain. The second period of his sickness commenced with a fall upon his occiput. Symptoms of the presence of a tumor in the brain were noticed now. The boy suffered under intermittent pain in the back part of his head, vomited often, and showed an inclination to fall down. Besides, an optic neuritis was detected, and he had pain attacks, with the hydrocephalic cry. No pain was noticed upon pressure of the occiput. He expired suddenly.

The post-mortem examination revealed a tumor in the posterior part of the corpora quadrigemina, whose substance was nearly destroyed. The tumor was only the size of a cherry, and could, therefore, not have exercised any unusual symptoms of pressure, as the nuclei of the motor oculi are situated in the substance of the posterior corpora quadrigemina. The paresis of the n. oculomotorii pointed even during life to the diseased part. This paresis and the locomotor ataxia, both symptoms of a disease in the posterior part of the corpora quadrigemina, make it certain that the said corpora must be considered as parts of the centers of coördination.

Goltz was the first who found that the optic lobes of lower animals are the central organ for the *equilibrity* of movements. The author confirms this statement, having made numerous experiments with frogs and pigeons. As the mentioned organs correspond with the posterior part of the corpora quadrigemina in higher animals, he examined these parts in dogs, and confirmed the same fact for them.

XXVII.—On a Congenital Teratoma of the Orbita. (Drs. Broeer and Weigert, of Breslau. Vol. 67. August, 1876.)

In 1875 a child was born with a tumor of the size of an orange proceeding from the right orbita. As the tumor began to grow rapidly, it was extirpated the sixth day after the birth of the child; but, before the operation, the tumor was punctured, on which occasion a large quantity of a yellow liquid was discharged. The tumor had a pyramidal form. The optic nerve took the place of the vertex of the pyramid, while the bulbus was placed upon the top of the tumor. After the tumor had been hardened in Mueller's liquid, it was dissected, and the following facts revealed: The bulbus had its usual size, yet had no globular form, as its posterior part was somewhat pointed. The interior chamber proved to have been filled with pus. There were several cysts closely attached to the bulb by connective tissue, of which the largest had been emptied by the puncture. The cysts were surrounded by a firm membrane. Their posterior portion was bordered by fatty tissue, in which the eye-muscles could be traced. Besides, there were observed behind and below the cysts a number of strange elements, as: *e. g.*, small pieces of bone and hyaline cartilage, cells of the character of white blood corpuscles, a part of true intestine, with two layers of unstriped muscular fibres and Lieberkuehn's glands, bronchial elements, whose walls were covered with ciliated epithelium, and which besides contained cartilage and glands, opening into the cyst.

Reports of Societies.

THE TOLEDO MEDICAL ASSOCIATION.

THE Association met at the office of the Board of Health, October 13, 1876, president Forbes in the chair; Dr. Currey, secretary *pro tem.*

REPORT OF CASES.

Dr. RIDENOUR exhibited a large, dense, fibrinous clot, with several smaller ones, removed from the heart of a man who died suddenly. The subject had been a sporting man, very large and powerful. He had spent the night previous to his death with a prostitute. On arising in the morning, he staggered, fell and died almost instantly. Post-mortem found the brain much congested, and the walls of the ventricles of the heart quite friable. These clots were found blocking the entrance of the pulmonary artery. No marked symptom of heart disease was noticeable during life, excepting at times palpitation, which had been heard and remarked upon by his companion the night before his death. Dr. Ridenour thought these clots had existed in the heart for some time previous to death.

Dr. **Biglow** did not believe that clots as dense as those exhibited could be formed just before death. Endocarditis may have been existing, and been the cause of those clots. Believed endocarditis may exist without impairing the patient's health. Dr. Fish regards this as possible.

Dr. **Waddel** regarded the possibility of clots such as those exhibited remaining in the heart while the individual enjoyed even fair health as far from being established. He regarded it as impossible. Thought even a small clot in the heart would give rise to distressing symptoms, and would be readily detected by physical examination. Five years ago lost a patient from heart clot when he had so far convalesced from a pneumonic attack that he sat up all the evening, ate heartily and smoked. After retireing, he raised up in bed to take medicine, at once complained of trouble in breathing, and died in fifteen minutes. His heart had been examined that day, and no sign of disease could be detected. Post-mortem showed heart clots plugging the pulmonary artery.

Dr. **Forbes** remarked that he did not think heart clot could be discovered before death. Had a marked example of this fact in a case which he reported to the society during the present year, when he had carefully examined the heart of a patient suffering from hypostatic congestion of the lungs. No abnormal sign could be discovered. While he was still by the bedside, the patient, who was lying comfortable, gave a few short twiches of the muscles and was dead. Post-mortem revealed heart clot. This man had always been healthy.

Dr. **Cheny** thought the distinction was often not made between heart syncope and heart clot. In the former the clot forms in the heart at the moment of death, while in the true heart clot death is not nearly so sudden. Only one week ago lost a patient fourteen years of age from this accident. He had been suffering for three days from typho-malarial fever; was doing well. He raised himself up in bed, and as a result fainted, from which he aroused in great distress for breath. This continued and increased until death followed after several hours. Regarded this a typical case of heart clot. Considered the case of Dr. Forbes as cardiac syncope.

Dr. **Ridenour** remarked in reply that there could be no doubt of the possibility of large clots remaining in the heart during life. The physical signs of their presence was the same as in valvular disease. Niemeyer affirms that such clots may remain in the heart during life long enough to form abscesses and disintegrate. There was no evidence of endocarditis revealed by post-mortem in this case. Believed those clots had been there for a long time.

and the palpitation observed was due to their presence. An atheromatous condition of the vessels existed.

Dr. Root reported that he had under treatment several severe cases of diphtheria, with a strong tendency to fatality, one case dying in twenty-four hours. The fauces were thickly covered with the diphtheritic membrane Several children in one family were affected. Asked for suggestions as to treatment. He was using quinine, tinct. ferri chlor. and salicylic acid.

Dr. Biglow spoke of the disappointment attending the treatment of severe cases under any form of medication.

Dr. Snetzler remarked upon the good results attending the use of ice outside and inside the throat.

Dr. Priest had lately seen six cases, but none of them severe. A formula consisting of hydrate chloral iv grammes, to glycerine xx grammes, had been highly recommended for local application. Believed the best results followed general treatment.

Dr. Chapman said that diphtheria found its subjects among the debilitated; hence the necessity of building up, sustaining, and thus bridging over the dangerous period of the disease. For this purpose quinia, tincture of iron, pot. chloras and beef tea are valuable. Referred to one case in which paralysis obtained three weeks after the disease had disappeared.

Dr. Reed believed in the value of constitutional treatment. Recommended a mixture of quinia, tinct. ferri chlor., and chlorate potassium, the medicines to be taken undiluted, in frequently repeated doses, no water to be taken for some time after. The local as well as the general effect was thus obtained.

Dr. Thorn agreed with Dr. Chapman as to the necessity of supporting treatment. Referred to the great success reported by Dr. Dunlap, of Springfield, in the use of permanganate potassium.

Dr. Ridenour regarded it as a local disease and no respecter of persons. First saw it in Pennsylvania in 1858. The treatment was then principally local with nitrate of silver in sol. (20 to 40gr.), also chlorate of potassium. The next epidemic used potassium permanganas. During the past year treated several cases entirely locally; all recovered. No quinine was given. For local applications prefers the permanganate.

Dr. Forbes related an instance when complete paralysis of the muscles of throat supervened three weeks after the recovery from diphtheria.

Dr. Ridenour reported the case of a lady of forty-five years, whose uterus was bound down by adhesions. She consulted a "quack," who told her that she had a uterine tumor, and commenced the use of sponge tents, which he continued for nearly six months constantly. When called to see the lady, Dr. R. found a tent in the uterus which had been introduced fifteen days previously. In removing it the upper portion broke off, and had to be removed with forceps passed into the uterus. There existed no evidence of any tumor whatever. The patient is slowly recovering.

Meeting adjourned.

OCTOBER 27th, 1876.

President Forbes occupied the chair.

DR. NOLAN presented to the association a unique case of deformity in the person of a boy five years of age, whose feet were enormously hypertrophied, the bones, as well as the soft parts being involved. Supernumerary toes and other congenital deformities also existed. The case was referred to the section on pathology to procure photographs and make a full report.

DR. EARL read an essay on exophthalmic goitre. The essayist stated that it was a rare form of disease, and of meagre literature. Its characteristics were protrusion of the eyeballs, and enlargement of the thyroid body, both depending on functional disease of the heart. It occurs more frequently in females. The symptoms are great rapidity of the pulse, anemia, increase of appetite, followed by anorexia, emaciation, and mental depression, with disturbed sleep.

The pulse is usually 100 to 120 per minute, but in one case observed it was 200. The protrusion of the eyeballs does not depend on increase of areolar tissue at the base of the orbit, but upon weakness of the recti muscles, aided by over-fullness of the vessels, induced by the increased action of the heart. Pressure on the carotids reduces the exopthalmic state. The thyroid enlargement is probably due to increased vascularity, and never increased nutrition. The increased action of the heart may arise from impaired nutrition of the nerve centers.

The heart affection may be organic, arising from purely functional derangement, the latter being, however, the most common form. Treatment consists in relieving irritation of the stomach, and the use of cardiac sedatives, such as aconite, digitalis, belladonna, etc. In a case observed in the clinic of Prof. Flint, the pulse being 200, aconite alone, in small doses, was prescribed. The effect was most marked. In one week the pulse was much diminished, and the eyes less prominent. Hygienic means are important.

DR. BIGLOW asked what organic disease of the heart was caused by the functional derangements?

DR. EARL replied that dilatation of the ventricles may ensue.

DR. WOODS remarked on the obscurity of the pathology of this disease. In a case recently under his observation, the fullness of the head and face, and throbbing of the carotids was remarkable. This intense action of the heart always exists, but there is surely a cause for the disease back of the heart, probably in the nervous system.

Dr. Curry regretted that the author had not gone more into details of the symptoms. A marked peculiarity of this disease had not been mentioned, viz., the tendency of one eyelid to droop, and inability of the lid to follow the motion of the eye, a valuable diagnostic sign first pointed out by Graefe. Did not think weakness of the ocular muscles caused the protrusion—venous stagnation a more probable cause. As the thyroid enlargement co-exists with the eye trouble, the influence it has in causing it is an interesting subject for consideration.

The generally received opinion is that the disease is of a nervous character. Galvanism has, in the hands of Dr. Bartholow, succeeded after all other means have failed.

Dr. Reid did not think the heart's action sufficient to cause the peculiar features of this disease. A rapid circulation is almost always weak, hence would lack force necessary to cause such results.

Dr. Chapman spoke of the value of galvanism in curing enlargements of the thyroid. Regarded the disease under consideration as arising from disease of the sympathetic nervous system. The pneumogastrics may be primarily affected, thence reflecting to the heart cause organic disease.

Dr. Biglow could not see why the heart's action should cause protrusion of the eyes in this case, when no such effect was produced in other diseases with rapid action of the heart. Probably the weakness of the muscles did not exist as a cause, as in this case.

Dr. Priest asked in what proportion of cases the goitre was associated with the eye trouble.

Dr. D. C. Chamberlin thought the protrusion of the eyes were not always equal.

Dr. Earl replied that the protrusion was not always equal. There is also a difference in the size of the lateral halves of the thyroid body.

The enlargement of the glands, and the protrusion of the eyes, are always associated.

Dr. Priest asked the opinion of the members regarding the case of a boy who, about five weeks ago, was shot in the leg with about fifty pigeon shots. Soon after the injury he complained of pain in the foot. This has become more severe and constant. The wounds are nearly healed, and yet the pain is now worse rather than better.

The question of applying an Esmarch bandage, and cutting down on the nerve and removing shot pressing it, was the one on which he wished advice.

Dr. Biglow would advise waiting.

Dr. Woods remarked as there was no pain at the site of injury, it could not be considered inflammatory. The operation proposed was a difficult one, and somewhat hazardous, from the difficulty in finding the foreign body.

The President remarked that this case is an important one, and has features peculiar to gun shot wounds. Neuritis from the injury, or a piece of the nerve being involved in the cicatrix, is a grave condition. In such cases the pain is always at or below the point of injury. Would advise waiting in the case under consideration, from the possibility that the pain might depend on inflammatory action at the site of injury.

The meeting then adjourned.

Correspondence.

DETROIT SEWERAGE---VITAL STATISTICS, ETC.

Editors of Detroit Review of Medicine:

THE increased healthfulness of Detroit is due in great part to the perfection of our drainage system.

The city lies along the beautiful river Detroit for about six miles, having a population of 114,000. The city also extends back from the river three miles. The highest point lies along Farnsworth street, three miles from the river, the elevation there being fifty-six feet. This allows the construction of sewers for three or four miles back with sufficient fall to carry all their contents to the river.

The river is 2,600 feet wide here. The current comes down from Lake St. Clair with a maximum velocity of two miles per hour at this point. This current is sufficient to remove all impurities coming from the sewers at once; at the same time the momentum greatly facilitates the out-current from the sewers.

The water level varies some feet in different years, but is subject to no sudden change, the limit in one year being not more than eighteen inches, the extreme in a series of years being five feet.

When the river is "up," the sewer openings are covered entirely, preventing any return current of air. Gases, however, tend always to return, and sometimes with great force. When the river is "down," currents of air may pass up the sewers also. This season high water has prevailed, and the sewers have been washed by frequent and copious showers. It is safe to say that no city is better located for perfect drainage, and, with wise forethought, our sewer system is equal to the demands of a large and rapidly growing metropolis. Formerly we suffered much from diseases having a malarious origin. Now, the suburbs, even, being sewered, these malarious troubles have decreased. While we have these natural and acquired sanitary conditions, we are often remiss in not protecting against the return of foul air and gases from the sewers. Many bath-rooms, water closets. and even whole residences, receive poisonous gases and stench from not only the immediate connection, but gas which was generated in and traversed the entire length of some large and crowded sewer. I shall consider next the methods by which this evil may be averted, and the present good sanitary condition of our city improved.

DEATH LIST FOR SEPTEMBER, 1876:

SEPTEMBER, 1876.	Under 8 years.	Over 8 years.	Temperature.	Humidity.	SEPTEMBER 1876.	Under 8 years.	Over 8 years.	Temperature.	Humidity.
1	6	0	62.2	75.7	17	3	2	56.5	83.3
2	3	3	60.2	63.3	18	3	2	60.2	74.7
3	4	2	63.2	63.0	19	4	2	64.0	63.3
4	2	3	60.5	66.3	20	4	2	67.7	68 0
5	5	1	57.0	60.3	21	3	2	65.0	81.7
6	9	1	60.7	76.7	22	3	3	63.0	86.7
7	5	1	68.7	88.3	23	3	2	62.2	86.3
8	3	6	66.0	72.3	24	4	2	62.7	85.3
9	2	2	62.7	72.7	25	1	1	63.5	72.3
10	6	1	59.2	92.7	26	3	2	48.5	67.0
11	3	2	58.5	79.7	27	1	2	48.0	61.0
12	3	2	56.7	64.7	28	1	2	51.5	76.0
13	1	1	57.5	73.0	29	2	3	45.7	76.7
14	4	2	59.0	79.3	30	2	1	44.5	72.0
15	5	1	58.5	71.7					
16	3	2	60.5	71.0		101	58		
					Average ...	3.37	1.93		

The mortality for the month was at the rate of 16.74 per 1,000 per annum. The total number of deaths for September, 1875, was 273, being at the rate per annum of 28.75 per 1,000.

C. C. YEMANS, M. D.

Condensations from our Exchanges.

PRACTICE OF MEDICINE AND THERAPEUTICS.

Salicylic Acid—Its Action in Diphtheria.—L. Letzerich (*Centralblatt fur die Chirurg.*) says that diphtheritic organisms placed in a closed vessel with solution of salicylic acid containing 0.35 of the acid, one part of spirit and fifty-nine of water, when examined after an interval of five months, were all found lying dead at the bottom of the vessel. A few drops of weak solution of salicylic acid (one third the above strength) brought into contact with diphtheritic organisms, arrested the movements of the bacteria present gradually, stronger solutions arrested them suddenly. The plasma corpuscles lost their brilliancy and acquired a double outline as if they were surrounded by an extremely delicate membrane; the substance of the protoplasm appeared to contain bubbles of air. Letzerich treated seven cases of diphtheritis with gargles of salicylic acid, and all successfully. In two other cases powdering the surface with a little dry salicylic acid proved very effective. From these and other observations he believes that salicylic acid is a powerful anti-diphtheritic agent.

IRRITANTS AND COUNTER-IRRITANTS.—Dr. Lauder Brunton (St. Bartholomew's Hospital Reports, 1875), concludes a very important paper on the above subject as follows:

1. Dilatation of blood vessels, and a rapid circulation through them, is advantageous for the tissues, and leads to increased growth and more rapid repair, while this arterial or active congestion is beneficial. Venous or passive congestion is injurious.
2. The application of an irritant induces dilatation of the vessels and a free current of blood through them. This will help to repair any injury done to the tissues by the irritant, so that the injury to a certain extent brings its own remedy.
3. Arterial congestion and inflammation are entirely different from, and independent of, each other, although they generally occur together.
4. Arterial congestion passes into inflammation when stasis begins to occur in the capillaries.
5. Stasis is not improbably due, as supposed by the brothers Weber, to coagulation of blood in the capillaries, the coagulation being induced by changes in the tissues composing the walls of the vessels or immediately surrounding them.
6. Pain in an inflamed part is probably due to distension of vessels and pressure on nerves by the blood being pumped with violence through the dilated arteries against the obstruction in the capillaries.
7. Pain may be relieved by lessening tension in various ways, by position, by cold, by warmth, by blood-letting, by counter-irritants.
8. Cold probably relieves tension by contraction of the arteries going to the inflamed part, warmth by dilating the capillaries of the surrounding parts, and thus drawing away the blood from the seat of inflammation.
9. At the same time that an irritant induces dilatation of the vessels in the part to which it is applied, it causes contraction of the vessels in other parts of the body.
10. It is probable that it does not cause contraction in all parts alike, but that definite areas of the skin correspond to definite sets of internal vessels.
11. The relief of pain produced by a blister in pleurisy, pneumonia, or rheumatic inflammation of a joint is probably due to reflex contraction of the arteries in these parts.
12. Blisters are useful in lessening congestion in pericarditis, and in relieving the pain of inflamed joints in rheumatism.
13. The benefit derived from their use in young persons, especially those suffering from a first attack, is very great. In elderly persons it is inconsiderable.
14. The beneficial action of a blister in callous ulcer is probably due to the increased supply of blood to the part induced by its application.

HERPES ZOSTER—ITS PATHOLOGY AND TREATMENT.—Dr. L. D. Bulkley (*American Journal af Medical Sciences*, July, 1876) summarizes our knowledge of herpes zoster as follows:

1. Whatever may be the cause of the nerve irritation, herpes zoster is always of nerve origin; that is, it is an inflammatory lesion of the skin, wherein the local cell action resulting in the production of vesicles is

but the result of nerve influence, a perverted cell action caused by perverted innervation.

2. From the almost constant changes found in the ganglia developed on the posterior or sensitive roots of the spinal nerves of the affected regions we must infer that the trophic changes observed in the skin have to do with the sensitive nerves.

3. We are not to conclude, however, that zoster is the result of inflammation of the sensitive ganglion alone, for the entire nerve on the distal side of the ganglion has been always found to be inflamed, and abundant proof exists of eruptions of zoster due to various nerve lesions, peripheral and central, injuries and disease of the transmitting nerves and of the cord and encephalon.

4. In certain cases the origin may be shown to be idiopathic inflammation of conducting nerves; or they may be affected by pressure or other alterations caused by the presence of a tumor; or the disease may be the result of surgical or other injury.

5. The origin, therefore, of herpes zoster is a direct nerve irritation and inflammation, and in ordinary apparently idiopathic cases the explanation of this is to be sought for in the same causes as give rise to neuralgias in general, some of which are traceable, many are not. The gouty habit inducing neuralgia can likewise give occasion to herpes, the direct exposure to cold of the terminal branches of a nerve; as in the head and neck, or elsewhere, can cause painful excitation of the nerve itself, or neuralgia, and is equally a cause of zoster.

6 The eruption of zoster is an epiphenomenon to primary neuritis and neuralgia.

7. The clinical history and therapeutics of herpes zoster are in themselves almost convincing proofs of the neurotic nature of the disease. In most cases, especially in younger patients, the treatment is purely expectant, while in severe cases and in elderly persons the neuralgia is the principal element requiring attention, and this is remedied by measures directed to the nervous system. In the majority of instances the nerve irritation, or inflammation, subsides spontaneously, the whole train of morbid phenomena occupying about the same length of time taken by other self-limited inflammations, while under circumstances the *sequelæ* require attention, as in other diseases. The local destruction of tissue is sometimes a troublesome feature in the way of ulceration or necrosis of the skin, or the neuralgia persists to a distressing degree, even under the most intelligent treatment.

8. Three therapeutic agents seem to have marked control over herpes zoster. First, phosphorus, which used in the form of phosphide of zinc, one-third of a grain with one-third of a grain of extract nux vomica, given every three hours, will pretty certainly *abort* the disease if given early. Second, electricity, the galvanic current passed directly through the affected nerves, their trunks and peripheral branches will have the effect of causing the affection to abort if used early, or check the pain and dry up the vesicles sooner than otherwise. Third, quinia with iron, will, if pushed early, shorten the duration of the disease, and relieve many unpleasant symptoms. The hypodermic injection of morphia relieves the pain, and if used early and repeatedly might abort the disease, by checking the nerve irritation. Ordinarily, the only local treatment required is of the inflamed surface—best accomplished by powdering it with starch, and keeping a single thickness of muslin firmly applied and left on until the vesicles are dry.

DIABETES—ITS NERVOUS SYMPTOMS.—Prof. Bouchardat (*Bull. Gen. de Therapeutique—Chicago Journal of Nervous and Mental Diseases*, July, 1875) gives the following account of the principal disorders of innervation observed during the course of glycosuria:

1. *Partial Anæsthesia* is more frequent than is perhaps generally supposed; he has observed it in the lower limbs, the thorax and face.

2. *Cramps* are among the most frequent nervous symptoms in severe cases. They occur oftener during the night, and are usually confined to the lower limbs. They disappear generally with improved regimen and exercise.

3. *Insomnia* is caused chiefly by the frequent necessity for micturition and is in great measure relieved when that necessity is removed. Exercise should be insisted on in the treatment of this condition, and an interval of some hours should intervene between supper and bed-time.

4. *Neuralgic Pains* in the region of the kidneys are complained of by many patients; sometimes they are felt in the dorsal region, more rarely in the lower limbs and articulations. Sometimes a feeling of numbness is complained of in the legs, or of chills or burning heat of the extremities.

5. *Weakness of Memory* is very frequent in diabetic patients past the meridian of life. This is not the usual senile weakness, but progresses much more rapidly, the ratio between them being as one to ten, and the faculties usually return with the disappearance of the other troublesome symptoms under treatment. Prognosis should be very cautious on this point.

6. *Inability for Mental Labor* is usually observed in diabetic patients, and improvement in this occurs with improvement in the other symptoms. In many cases a recklessness and want of care is observed to an astonishing extent. An irresistible desire for sleep after meals is often observed.

7, *Irascibility* is frequent, especially in male patients, and it seems to have a tendency to increase the amount of sugar in urine.

8. *Melancholia and Hypochondria* accompany cases of long standing, especially in males. This is due to several causes—idleness induced by the disease, premature impotence of the patient, and the feeling of being afflicted with an incurable disease.

LESIONS—INTRA-OCULAR—LAWS OF THEIR FORMATION.—E. Bouchut (*La France Med.—Chicago Journal Nervous and Mental Diseases*, July, 1875), gives the following laws of the formation of intra-ocular lesions depending on disease of the brain, cord and meninges:

1. Whenever the cranial circulation is interrupted either in the sinuses and meningeal veins by compression of the ventricles distended with serous fluid or by any other cause, an arrest of the venous circulation takes place, which produces in the eye swelling, hyperæmia and œdema of the papilla, varicosity of the veins, and sometimes hemorrhages.

2. When a tumor with encephalitis or when a partial encephalitis exists, there follows a descending phlegmasia which causes a sclerosis of the optic nerve, an exudation that constricts the papilla, and finally cause its atrophy.

3. If the cord is affected by an anterior or posterior sclerosis, since by reason of its relations with the sympathetic, the spinal cord acts on the eye, there results a papillary hyperæmia which in time causes atrophy.

4. Finally, in all the diatheses and infections, where the whole system suffers, the eye also is affected, and we have certain forms of neuritis and choroiditis.

INCONTINENCE OF URINE—CURE.—Dr. J. J. Reid (*New York Medical Journal*, September, 1875) reports a case of incontinence of urine in a boy, in which, on investigation, there was found such an atonic condition of the muscular walls of the bladder that it could not empty itself. The bladder was emptied by a catheter, and tinct. of nux vomica given in full doses three times a day. This treatment was attended by good results.

COLORED LIGHTS IN THE TREATMENT OF THE INSANE. — Dr. Ponza (*Anales Med. Psy.—London Medical Record*, Jan. 15, 1876) reports some cases in which insanity was treated by colored lights. He placed in a red-tinted room with red windows a patient suffering from melancholia who had long been dull, taciturn and difficult to feed. Three hours afterwards he found his patient gay and smiling and asking for food. Another melancholic patient, who remained all day with his hands pressed against his mouth to stay the introduction of poisoned air, was placed in the red chamber. Next day he rose, swallowed breakfast with great avidity, and in a few days he was discharged as cured.

In a blue-walled chamber the Dr. placed an excited and irritant patient in a strait waistcoat, and in a few hours he was much calmer.

Another insane patient was placed in a violet chamber, and the next day he was discharged quite well.

It will be remembered that violet light possesses the most intense *electro-chemical rays*—that red light is just as rich in *heat rays*, whilst blue light is absolutely destitute of calorific, chemical and electrical rays. Hence the latter is calculated to soothe the furious agitation of maniacal persons. The influence of altered light may with advantage be extended to other nervous diseases—chorea, hysteria, epilepsy, puerperal eclampsia, etc.

GENERAL PARALYSIS OF THE INSANE—CAUSES.—Dr. Ashe (*Journal of Mental Science*, April 1876—*London Medical Record*, May 15, 1876) advances two original ideas on the causation of general paralysis. Briefly stated, these are a general paralysis caused by the use of *beer* and by an *excess of phosphorus* in the system.

General paralysis scarcely exists in Ireland, but is common in England and Scotland. The English and Scotch greatly exceed the Irish in their consumption of malt liquors, and a highly phosphorised diet. Dr. Ashe is not able to find any other element of causation in which these countries differ.

OBSTETRICS.

UMBILICAL CORD—ITS CONGENITAL ULCERATION.—Dr. J. F. Jenkins (*Amer. Jour. Obstet.*, Oct., 1876), says that he attended a lady in premature labor from albuminuria, at the end of the eighth month. When the membrane burst the liquor amnii discharged was seen to be almost pure blood. The child was dead and very pallid, apparently exsanguinated. He estimated that there was at least a quart of blood in the amniotic cavity. On looking for the origin of the hemorrhage, a small perforation was found in the umbilical cord, about half an inch from its abdominal insertion. The cord was much narrowed at this point, but not twisted. A microscopical investigation showed that the fatal hemorrhage into the amniotic sac, resulted from rupture of the umbilical vain depending upon fatty degeneration and consecutive fragility. A case almost unique.

POST PARTUM HEMORRHAGE TREATED BY A NEW METHOD.—Dr. H. O. Heyatt (*Amer. Jour. Obstet.*, Oct., 1876,) says that for four years he has adopted the following plan for stopping post partum hemhorrage due to inertia of the uterus: He passes into the cavity of the uterus a rubber bag, which is then distended with air or water until it fills the entire uterine cavity. The bag presses in the direction of the least resistance, and adapts itself to all the little inequalities of the placental site. In this way elastic pressure is brought to bear upon the mouths of the uterine vessels, and so effectually seals them. The hemorrhage being controlled, various means can be adopted for inducing uterine contraction. Every case in which this plan was followed terminated happily.

DISPLACEMENT OF THE UTERUS BY DISTENTION OF THE BLADDER. —Dr. Braxton Hicks (London *Obstet. Jour.*, Aug., 1876) details the result of numerous experiments made on the dead body, with reference to the above matter. He observed the following deductions: (1) Distention of the bladder takes place first backwards towards the sacrum, and then upwards. As a general rule, the uterus becomes retroverted when moderate distension has taken place, often so much so that it becomes horizontal. Further distention, though generally completing the retroversion, may distend the anterior wall of the vagina, and so tend to remedy the retroversion, but encourage flexion, more especially if the attachments be firm. (2) If the rectum be full when the bladder is distended, the uterus does not become retroverted, but is raised bodily in the pelvis, in an axis more or less perpendicular to the plane of the brim. (3) If the vaginal portion of the bladder be relaxed, the vagina first becomes distended and the cervix uteri is carried backward and rendered vertical. At first it is somewhat ante-verted, but ultimately raised out of the pelvis in a nearly upright position. (4) If the uterus is at first retroverted, and the vaginal portion of the bladder is at first distended, the retroversion is restored.

SIMPLE YET EFFICIENT METHOD FOR REMOVING MUCUS FROM THE NECK OF THE UTERUS.—Prof. Pajot (*Annal de Gynecol.*—*N. Y. Med. Jour.*, Nov., 1876) recommends for removing the tenacious mucus often adhering to the os and cervix uteri, the following: A pledget of lint is to be saturated in the yelk of a fresh, raw egg, and then immersed for a few seconds in the mucus. One or two injections of water are then to be made into the speculum, while the lint is gently moved about. After allowing the liquid to escape, the neck is to be dried, and it is then found free from all secretion.

MANAGEMENT OF LABOR IN CONTRACTED PELVIS.—Prof. Hildebrandt (*Amer. Jour. Obstet.*, Aug., 1876) gives his views on this matter, and his practice as follows: (1) Premature labor is induced in all cases, provided they present themselves early enough, where the pelvis is of the flat and flat rachitic types, with a true conjugate of 2.5 to 3.25 inches; and also in generally contracted pelves, with a conjugate of 3.14 to 3.72 inches. Dohrn's rules are strictly observed, to entrust the treatment of the case to but one physician, and to choose the simplest method, viz., the introduction of a catgut bougie, preceded, if necessary, by a laminaria tent. (2) In pelves of 2.5 inches conjugate and upwards, the accommodation of the head to the pelvic cavity is patiently waited for and facilitated by maintaining uterine activity and observing the proper lateral decubitus. Should symptoms supervene which indicate the inability of nature to expel the child, or which call for a speedy delivery, the perforation even of the living child is performed, and the forceps and version employed only in exceptional cases. (3) As a rule, both forceps and version are procedures but little adapted to conduct the head through a contracted pelvis, and, if forcibly employed, dangerous and fatal to mother and child. It is evident that the proper plan to overcome the obstacle of a narrow pelvis, is to seek to produce the most favorable mechanism for the passage of the head, and not to drag it forcibly through, either with the forceps or the hand, after version. The rational method is to study the various ways in which the head adapts itself to the different forms of pelvic contraction, and then endeavor, in each individual case, to favor the natural mechanism. But neither the forceps nor version are suitable means for this purpose. (4) Version is indicated in a lax unirritated uterus, especially if the membranes be still intact, or have only just ruptured, in cases where, beside the narrow pelvis, conditions are present which prevent the normal entrance of the head into the brim (pendulous abdomen—excessive pelvic inclination, with anteversion of the uterus—physical weakness of the uterus) or necessitate a speedy completion of the labor (deep seat of the placenta and flooding, eclampsia, etc.) (5) The forceps is to be applied to the presenting head, under the above indications, when the head has already nearly passed the contracted plane of the brim, and the bitemporal diameter has entered the pelvic cavity, and only slight force is required to overcome the remaining impediment. Its employment is desirable in such cases, also, when the head is still at the brim, because two or three tractions will then generally suffice to conquer the difficulty. In any case where an experienced hand has failed to overcome the obstacle at the brim with three steady tractions, the forceps should be discarded and craniotomy at once performed. (6) Forceps and version both have but a very limited range of utility and safety in the management of dystocia in the distorted pelvis, and the writer has adopted the practice, supported by theory and experience, of leaving the delivery, even in the higher grades of pelvic deformity, to the powers of nature, merely taking care to regulate the contractions of the uterus and the mechanism of the presenting part, and resorting, when necessary only, to craniotomy, without subsequent extraction. (7) Since becoming acquainted with the latest modification of the cranioclast by Braun, Hildebrandt has entirely discarded the cephalotribe, and treats cases requiring perforation by first leaving the expulsion of the evacuated head to nature, if the expulsive forces are equal to the task; if, however, the pains are insufficient, or the skull is too unyielding, the cranioclast is at once applied, the solid branch being passed into the cranial cavity, and the fenestrated blade over the most solid part of the head and face, the compression screen is firmly closed, and the head extracted by slow and steady traction. The skull becomes elongated by traction, and accommodates itself gradually to the shape and size of the pelvic cavity, and is thus able to pass even extreme distortions without injuring the soft parts. Performed in this manner, craniotomy is a measure positively devoid of danger to the mother.

PHYSIOLOGICAL ACTION OF REMEDIES

Sanguinaria—Its Physiological Action.—Dr. R. M. Smith (*American Journal of Medical Sciences*, October, 1876) reports in detail one hundred and fifty-three experiments made with this alkaloid on cats, dogs, rabbits, frogs, guinea pigs, pigeons, etc. He concludes his report as follows: (1) Sanguinaria destroys life through paralysis of the respiratory centre. (2) It causes clonic convulsions of spinal origin. (3) It has no effect on either the motor or sensory nerves. (4) It causes marked adynamia and prostration from its depressing action on the spinal ganglia and muscles. (5) It decreases reflex excitability through irritation of Setschenow's centre and by ultimate paralysis of the spinal ganglia from large doses. (6) It produces in cats, dogs and rabbits a fall of pulse and blood pressure, the fall of the latter being preceded by a temporary rise after the administration of proportionately small doses. (7) The fall of blood tension is caused by a paralysis of the vaso-motor centre and by a paralysis of the heart itself, probably of its muscular structure. (8) The temporary rise in blood pressure is due to irritation of the vaso-motor centre, previous to its paralysis by small doses. (9) The reduction in the pulse is due to direct action of the poison on the heart, through paralysis of its motor power. (10) Sanguinaria has no action on the liver. (11) It causes marked salivation. (12) It slows the respiratory movement, by prolonging the pause after expiration. (13) This reduction is caused by loss of tonus of the respiratory centre. (14) Small doses cause an irritation of the respiratory centre, and consequently an increase in the number of respiratory movements. (15) Applied locally sanguinaria soon causes complete paralysis of striped muscular fibre. (16) It always dilates the pupil. (17) It is an emetic. (18) It always lowers temperature. (19) When introduced into the circulation it diminishes muscular contractibility.

COLCHICINE—ITS PHYSIOLOGICAL ACTION.—A report (*London Lancet*, 1876) summarizes the action of colchicine as follows :

1. It produces complete loss of sensibility due to paralysis of both the peripheric and centric nerve endings, hence reflex excitability is abolished, but the motor nerves and the muscles retain their excitability till death occurs.
2. The heart continues to pulsate even after the paralysis of the central nervous system has commenced, and blood pressure remains long unchanged, and paralysis of the inhibitory nerves of the heart occurs at a late period.
3. Respiration becomes gradually less and less frequent until it is entirely arrested. In warm-blooded animals, especially in cats, the mucous membrane of the whole gastric and intestinal tract is swollen and strongly injected, and the intestines contain bloody mucus. There is diarrhea, vomiting and colicky pain during life.
4. The kidneys are strongly hyperæmic and their secretions diminished.
5. The action of colchicine is slow. Death cccurs only after several hours, and Schiff observed that the amount of the dose has scarcely any perceptible influence on the intensity or rapidity of the action of the poison.

ACTION OF PILOCARPIN (ACTIVE PRINCIPLE OF JABORANDI) UPON THE SUBMAXILLARY GLAND OF DOG.—Dr. J. N. Langley (*Journal of Anatomy and Physiology*) gives the details of a large number of experiments made upon the dog to determine the action of pilocarpin. He found its action to be:

In Small Doses, i. e., up to about 30 mgr. : (1) It exerts on the gland an action very similar to that produced by stimulation of the chorda tympani. (2) It causes a rapid secretion and a considerable increase of blood-flow—both secretion and blood-flow gradually declining. (3) Its effects are little if at all altered by section of the chorda tympani, or of the sympathetic nerve. (4) Stimulation of the chorda tympani increases the pilocarpin effects; i. e., the nerve is functionally unaltered. (5) Stimulation of the sympathetic diminishes its effects, so that this nerve, too, is functionally unaltered. (6) The secretion is stopped by injecting atropine, but a quantity of atropine sufficient to paralyze the chorda tympani does not prevent a relatively large quantity of pilocarpin from producing its ordinary results. In fact, the secretion, or absence of secretion, is dependent on the relative quantity of the two poisons present, just as is the stand still or beat of the heart.

In Larger Doses. (1) Instead of causing a stronger saliva flow it causes none at all, and further, prevents the chorda tympani from producing any secretion. (2) It considerably diminishes the blood flow through the gland, as well as the effect of the chorda tympani on the blood flow (3) It does not, however, stop the sympathetic secretion. The action is, indeed, not very dissimilar to that of atropine; this agrees with its action on the vagus and inhibitory apparatus of the heart, where, in large doses, it prevents any inhibition of the heart from stimulation of the vagus, or of the junction of the sinus venosus, just as atropine does.

SURGERY.

Itinerant Pile Surgeons—Their Secret.—Dr. E. Andrews (*Chicago Medical Journal and Examiner*, Oct. 1876) has investigated the secret of certain intinerants who infest Illinois. The secret has been sold to various persons at prices varying from fifty to twelve hundred dollars. The plan of operation is briefly, to procure a good hypodermic syringe and the following solution:

℞	Crystallized carbolic acid…………………………	ʒ iij.
	Pure Oil……………………………………	fl. ℥ i.
Mix.		

Some use equal parts of oil and carbolic acid—some substitute glycerine for the oil—some use ergot. When the pile is internal and not readily brought down, a Sim's speculum is employed to uncover them. The operator generally takes only one pile at a time, always selecting the uppermost first, and injects into its interior from four to six drops of the carbolized oil. The injection turns the pile white and causes it to shrink away without the inflammation being severe enough at any one time, as a general thing, to prevent the patient from attending to his business. When the irritation of the first injection has measurably subsided another pile is attacked in the same way. Thus far no actual deaths are known have resulted, although some of the operators have been so alarmed at the effects as to seek for advice from qualified surgeons. If it should prove practically that there is no fear of embolism the operation may prove a valuable addition to our resources.

Comparative Value of Caustics and Astringents in Treating Conjunctival Diseases.—The section on ophthalmology, International Congress, adopted the conclusion of Dr. H. W. Williams on the above topic (*Medical News and Library*), viz: (1) In a considerable number of essentially transient affections of the conjunctiva and in pterygium or other growths no active treatment by caustics or astringents is required. (2) When disease affects only a limited portion of the conjunctiva, as in phlyctenular inflammation, the mildest stimulating or astringent remedies are usually sufficient. (3) In the acute and chronic forms of general conjunctivitis astringents are as a rule safer as well as more efficacious than caustics, and therefore better adapted to the requirements of the general practitioner.

Are Progressive Myopia and Posterior Staphyloma Due to Hereditary Predisposition, or can they be induced by Defects of Refraction acting through the Influence of the Ciliary Muscle?—The conclusions of Dr. E. G. Loring (*Medical News and Library*, October 1876) were adopted by the ophthalmological section of International Medical Congress—viz: (1) From the fact that so large a per centage of children are myopic whose parents are not near-sighted, while the myopia increases directly with the amount of tension of the eyes, and from the fact that an interchange of refraction may occur whereby one eye which is not congenitally myopic may become so in spite of hereditary tendency against it, it would seem to follow that hereditary predisposition, though undoubtedly a potent cause, is not only not the sole cause, but it is not even the predominating cause. (2) The action of the ciliary muscle taken by itself exerts but little influence on the production of myopia and still less on the formation of the cone.

Aural Diseases—Importance of Treatment in their Early Stages.—The conclusions adopted by the Section on Otology, International Congress, were presented by Dr. A. H. Buck, and are as follows (*Medical News and Library*): (1) Chronic Otorrhea is at present a very common disease, due in most cases to the want of proper treatment during the acute stage of the affection. (2) It is by no means a harmless affection. (3) It may be fairly classed as a preventable disease, at least among those who possess a healthy constitution. (4) Paracentesis of the membrana tympani, if resorted to during the first few days of the attack and if not carried out too timidly, *i. e.*, if a free incision be made and not a mere prick, is almost a sure preventive of the subsequent chronic diseases. (5) The profession at large, and especially the medical schools, should give the subject more earnest thought than they have in the past. These conclusions have relation to affections of the middle ear associated with the formation of pus.

STRANGULATED HERNIA REDUCED BY CUPPING.—Dr. B. H. Washington (*Nashville Medical Journal*, Sept., 1876) recommends as painless, easy and quick the following plan for reducing strangulated hernia. A dry cup is applied over the abdominal wall—say over the umbilicus—then an assistant standing between the legs of the patient, lifts the hips as high as he can. The operator now draws on the dry cup and produces a vacuum, and the atmospheric pressure being superadded to the weight of the intestines gravitating towards the chest a reduction is easily effected.

BORACIC ACID AS A SURGICAL DRESSING.—Dr. L. Crane (*London Lancet*, August, 1876) calls attention to the value of boracic acid in the dressing of wounds. He uses it in the form of boracic lint and cotton wool, a concentrated watery solution of the acid and boracic ointment. The boracic lint and cotton wool are prepared by soaking the lint and wool in a saturated boiling solution of the acid. On drying, these are ready for use. The concentrated solution is prepared by dissolving the acid in boiling water to saturation. The ointment is made by rubbing down one drachm of the acid with one ounce of simple ointment. From these preparations, Dr. Crane obtained far better results than from the ordinary agents. Its special advantages are: (1) It is an antiseptic which does not irritate and inflame, and so allows the natural processes of healing to go on without much interruption. (2) It is exceedingly simple in its application, and can be used apart from all the details required by a thoroughly antiseptic method. (3) It can be used in the shape of the lint, lotion, cotton wool, etc., in combination with most other methods of treatment. Its cost is trifling.

ANEURISM—ITS MEDICAL AND SURGICAL TREATMENT.—The surgical section of the International Medical Congress, after hearing a paper on this subject by Dr. W. H. Van Buren, adopted his conclusions (*Medical News and Library*, October, 1876):

1. Tufnell's treatment of aneurism by rest, position and restricted diet offers a valuable resource in thoracic and abdominal aneurisms.
2. It should always be tried in innominate, subclavian, subclavic, axillary and iliac aneurisms before resorting to measures attended by risk to life.
3. For aneurisms of subclavian and iliac arteries the Hunterian operation, with our present means of preventing secondary hemorrhage, is not justifiable.
4. For reasons set forth by Holmes and Henry Lee, "the old operation" cannot properly be substituted for the Hunterian operation in these cases, but should be held in reserve for surgical cases.
5. It is the most safe and surgical resource in gluteal aneurism if the circulation can be commanded by the hand in recto.
6. The mode of cure by embolism aimed at in the method of manipu-

lation is not unfrequently the explanation of what is called spontaneous cure of aneurism.

7. The value of Esmarck's bandage in the treatment of aneurism is probably not fully estimated.

8. In view of the promising features presented by the cases of Levis and Bryant, in which horse hair was introduced into an aneurismal tumor, the repetition of this operation, or the substitution for horse hair of Lister's prepared catgut, or other animal substance, may be properly tried.

COXALGIA—ITS TREATMENT.—The surgical section of the International Medical Congress, after hearing a paper on the above subject by Dr. L. A. Sayre, adopted the following views. No. 2 was not adopted unanimously. (*Medical News and Library*, October, 1876):

1. Morbus coxarious is a disease most frequently met with in early childhood, or the age of reckless indifference.
2. It is almost always of traumatic origin, and not necessarily connected with a vitiated constitution.
3. Rest and freedom from pressure of the parts involved, while at the same time the rest of the body is allowed free exercise in the open air, and a nutritious diet, is the best treatment that has yet been devised for this disease.
4. If this plan of treatment is adopted in the early stages of this disease, the majority of cases will recover with nearly, if not quite, perfect motion, and without deformity.
5. In the advanced second stage of the disease, when absorption of the effused fluid cannot be produced, then it is better to puncture or aspirate the point, and remove its contents, than to leave it to rupture by ulceration.
6. In the third stage of the disease, when the treatment recommended has been properly applied without satisfactory improvement, but progressive caries continues, the exsection of the diseased bone is not only justifiable, but in many cases absolutely necessary.
7. The operation of exsection of the hip is easily performed, and in itself attended with little or no danger.
8. After exsection of the hip joint in cases of progressive caries, the recovery is much more rapid and certain, and infinitely more perfect as to form, motion, and the usefulness of the joint and limb than when left to the slow process of nature.

SUBCUTANEOUS DIVISION OF THE NECK OF THE THIGH BONE.—The surgical section of the International Medical Congress, after hearing a paper on the above subject by Dr. William Adams, adopted his conclusions:

1. Bones can be divided subcutaneously like tendons, and the operation of completely dividing the neck of the thigh bone by a small saw introduced through a small subcutaneous puncture is a well-established surgical operation, attended with very little risk.
2. The long bones can be completely divided by the same method in any part of their length, with very little risk.
3. In a large proportion of cases the healing of the wound takes place by the first intention, and no swelling, redness or inflammation follows. These cases of subcutaneous osteotomy proceed as favorably as subcutaneous tenotomy.
4. In some cases a little suppuration from the track of the wound, amounting to a few drops in the day, does occur for a week or more after the operation.
5. In a very few cases deep-seated suppuration occurs, but in only one of these, so far as at present known, has death resulted from pyæmia out of the twenty-three recorded cases.

6. The permanent result of the operation has hitherto generally been to correct the deformity, and to obtain bony anchylosis with the limb in the straight position, but in several instances free motion has been obtained and remained only for a few months, when it has been gradually lost. In a few cases free motion has remained for about a year, and we hope will persist through life, but time and further experience are necessary before this can be confidently stated to be a reliable result of the operation.

Editorial.

NOTICE TO CORRESPONDENTS, ETC.—Communications intended for publication, and books for review, should be directed to "Editors of Detroit Review of Medicine, care of E. B, Smith & Co., Detroit."

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Original Articles, Reports of Medical Societies, Observations, Correspondence, News, etc., of general interest, are respectfully solicited from every source. Articles should be practical and carefully prepared.

The Editors will not be responsible for statements made over the names of contributors.

STATE MEDICINE AND SYPHILIS.

FOR ages syphilis has been a potent destroyer of the race. The study of its natural history and treatment has engaged many careful observers and able thinkers. It may fairly be said that at the present time we have a tolerably clear idea respecting the entire subject. But this does not satisfy the medical profession. Having learned that a disease is preventable, it is irresistibly impelled to seek the establishment of such measures as will prevent it. Thus vaccination and isolation have checked the ravages of small-pox, and well-nigh robbed it of its terrors. In a variety of ways many infectious and contagious diseases have been so controlled as comparatively to do but little harm. For the control of syphilis a variety of plans have been adopted, and concerning their efficiency there are still a variety of opinions. In this state of affairs any new plan deserves careful consideration. In his annual address, the late President of the American Medical Association presented a new plan for our consideration. The association recognizing the importance of the subject, voted "that 10,000 copies of that portion of the President's address relating to State medicine and contagious diseases be printed for public distribution!" This reprint is now before us. It defines the object of State medicine as follows: "To prevent the origination of disease—to prevent its spread—to circumvent it—to extinguish it, whether it be zymotic, contagious or specific—in short, it is the function of State medicine to protect the public health." State medicine is under the direction of boards of health. These boards "should take cognizance of, and have control of any and every focus of infectious disease, call it by what name you may." As demonstrating the importance of legislating respecting syphilis, attention was directed to Dr. Gross' address at Detroit, 1874. Further illustrations were adduced for the benefit, not of the direct hearers, but "for those behind and around them who live in darkness and utter ignorance of the dangers that threaten them." The question of the day, respecting syphilis, is its *prevention* and *eradication.* To solve it the press, pulpit, and women of the country must be called upon to proclaim the truth broadcast over the length and breadth of the land. "We must keep the subject not only before the profession, but we must keep it before the people, and we must appeal to legislation to give us the power to blot out this blight from among us." The plans adopted in France and England were deprecated as being either a licensing of prostitution or a class legislation. It was recommended "to give the already existing boards of health in the various cities the same power over syphilis that they now possess over cholera, small-pox, and yellow fever. They should have the power of searching out the abode of syphilis and of sending its victims to hospitals for treatment." "On all steamers or sailing vessels, whether foreign or coastwise, entering port, the surgeon of the vessel should be required to make affidavit that he had examined personally every seaman and every male steerage passenger on the day preceding their arrival in port, and that there was no case of cholera, small-pox, yellow fever, syphilis, scarlatina, or other infectious disease aboard. If there should be syphilis, then the subjects of it should be taken in charge by the board of health and sent to hospital for treatment, to be retained there till cured, or to be returned to the vessel from which they were taken, whenever said vessel should be ready to sail from port again. If said vessel had no surgeon on board, then it should devolve upon the quarantine officers to examine every sailor and every steerage passengers before landing, and to send every case of syphilis to hospital for treatment." For stamping out the disease in towns and cities, their boards of health must have plenary powers of an absolute character over syphilis. In legislation the simple need is to rank syphilis with small-pox, and give boards of health complete and arbitrary power to isolate the cases—destroy the contagion. "The plan is simple—self-evident—requiring no complex legislation—no cumbersome machinery nor unknown detail." Would that we were able to adopt the complacency with which Dr. Sims concludes the delineation of his plans. Whatever way we view it, the plan seems to us utterly impracticable. Before syphilis can be quarantined it must be recognized. To recognize small-pox, yellow fever, or cholera, in nearly every stage, is an easy task. Certain symptoms, which cannot be concealed, point immediately to the direct diagnosis. Further, as no moral question is involved, less desperate efforts would be made for their concealment. On the other hand, in many of its stages, syphilis presents no external symptoms, and sometimes there is no characteristic lesion to be detected on the most minute physical exploration. Further, most regard syphilis as connected with a certain moral turpitude, and hence make special efforts to conceal their symptoms. In some cases, it is true, the external evidence is clear enough. But in most, a minute examination of the naked person would be required to make out the diagnosis, and in a certain proportion of cases even this would fail to prove the existence of syphilis in cases that would still propagate it by sexual intercourse. Fancy the incoming passengers of every ship, stripped as they approach shore, to undergo the examination necessary to prove they did not have syphilis. Trains of cars coming to or leaving cities should be subjected to a similar examination, and of all who come to or depart from our commercial centers. Nor can any class of passengers be exempted, because all classes of men and women have been known to carry syphilis, and class legislation is not to be tolerated. It seems to us plain, that before any extensive quarantine of syphilis is attempted, some certain method for diagnosticating it from its external signs alone must be devised. Then it might be possible to turn it over to health boards for treatment similar to that accorded to small-pox.

Another fact which renders it impracticable to rank syphilis with small-pox, as a fit subject for preventive treatment by boards of health, is its *extensive prevalence.* Of small-pox we have but a few cases in any locality; but of big pox we have cases countless, including officials of every class—probably members of health boards. This is abundantly substantiated by Drs. Sims, Gross, and a host of other writers, and is perfectly familiar to every physician. This, no less than the difficulty in diagnosis, renders all legislation respecting the matter a peculiarly complicated problem. If syphilis was epidemic, or confined to one city, county or class, or age or sex, or generation, it could be governed with comparative ease. But in almost everything, except its mere contagiousness, it is totally different from all other contagious diseases. It is never absent from city, town or country. It begins at the top of society and goes down, at the bottom and ascends, at every point between, and works in every direction. No plan thus far proposed reached beyond a certain class, notorious as shamefaced offenders. They may have done good in checking the ravages of syphilis in these classes, but, meantime, the disease has strengthened itself in other quarters, and we doubt whether, *on the whole,* legislation has actually stayed its ravages. We are strongly of the opinion that the only safe and effectual preventive of syphilis is the prevention of all illicit sexual intercourse. If universally adopted, this plan would, in four generations, wipe all traces of syphilis from the earth. Any plan will be successful in as far as it accomplishes the above. The preaching of this from every pulpit, every paper, by every society, in every home, and to every individual in the earth, would ultimately stamp out syphilis, if the preaching was effectual to convince and convert. When the masses shall thus have been educated to believe that stealing, bearing false witness, and unphysiological sexual intercourse are alike crimes, then some effective legislation can be adopted. Until then we fear that all legislative devices will be essentially failures.

MEMORANDA.

No error is harmless. Every one will sooner or later do him who harbors it a hurt.—*Schopenhauer*.

Hygiene aims at "rendering growth more perfect, decay less rapid, life more vigorous, and death more remote."—*Parkes*.

No patent medicines—no unreliable persons or things are allowed in the advertising columns of the *American Agriculturist*.

Dr. W. B. Geike (Canada Lancet, Oct., '76), reports the case of a lady suffering from gastric ulcer, who had complete suppression of the urine for *thirty days*.

Of the Cook Co. Insane Hospital, the Chicago *Medical Journal* says: "Bad location, incompetent physicians, poor food, poor beds and clothing—and all this for $70,000 per annum.

Vulpian believes that no true theory of sleep has been adduced, Anemia, hyperemia, or carbonic acid theories he rejects as unworthy of belief.

To prevent the formation of milk, Dr. Peaslee recommends that the breasts, after delivery, be tightly strapped by means of adhesive plaster. In five cases he reports perfect results.

A Chicago coroner relates a case in which a boy, employed as a clerk in a retail drug store of that city, stated to a jury that it was not necessary to weigh morphine for the retail sale, and that he could tell by his eyesight "how much he could sell for five cents."

A contractor has agreed to bury Chicago paupers for $1.40 each. He proposes to sell the bodies for dissection, and bury the pieces. Thus he will carry out his contract, make some money, serve science, and save expense to the city.

MASTURBATION—NEW TREATMENT.—Dr. Yellowlers of Glasgow, reports twelve cases of masturbation successfully treated by the following method: He pierces the prepuce, at the very root of the glands, with an ordinary silver needle, and then ties the ends together. This makes erection so painful as to render it practically impossible.

Owing to the severe drought of last summer, the aqueduct department of New York city has been compelled to lower the pressure to one-half during the day, thus cutting off the supply to all but the lower floors of the dwellings. Should this state of things continue, there is every probability that a variety of diseases will be engendered by escape of sewer gas, etc.

The Louisville *Medical News* says "that the gentleman whose business it was to audit the accounts of the Louisville Medical College, declared that during his term of service no student paid the regular advertised fee of the college, viz.; $120. One promised to pay $160. *He did not know* *that he did so.* Yet the organs of the Louisville college talk contemptuously of the low fee schools of the West."

PHYSICIANS' COMBINED CALL-BOOK AND TABLET.—Devised by Ralph Walsh, M. D., 227 Four-and-a-Half street, Washington, D. C. This excellent little book has been much improved in the present issue. Spaces for dates have been enlarged, and the call list interleaved. The price remains as before, $1.50. We are sure that those needing such a book will experience much satisfaction in the use of this.

The London correspondent of the *Medical Times*, August, 1876, says that economy is the order of the day, and the luxuries of professional consultations are being largely foregone. As for general practitioners, whose services can scarcely be dispensed with, they have had to undergo the trial of an unwonted healthy season. One way and another, the balance at the bankers will not indicate a very expensive holiday for the profession this year."

The editor of the *Medical and Surgical Reporter* says "that a physician who had received a vaccine crust, wrote that he had vaccinated fifty children with it, and not one had taken. Another became even abusive, because the quills sent him *had nothing in them.* A third stated he had soaked the quills in boiling water, and yet, when he had used them, he did not produce a vesicle. A fourth, that he had used one quill on twenty arms—*all failures.*

Dr. F. H. Gerrish and Wm. W. Greene, of Portland, Me., have recently exposed a medium fraud which had flourished in their city. One gentleman secured the medium by holding her hand, while the other pushed aside a screen and discovered the apparel of the lady in a heap at the foot of the stool, and pinned to the floor. Her trick was shown to consist in wearing undergarments with which she could emerge from her external apparel with ease, and, to all outside appearance, without any disturbance.

Messrs. Walz & Stillwell, chemists endorsed by Dr. E. R. Squibb, have found that the opium antidote manufactured and sold by Mrs. J. A. Drollinger, of La Porte, Ind., is a glycerine colored with analine red, and containing in solution crystallized sulphate of morphia, about seven grains to the ounce.

Dr. H. Carmichael, Prof. of chemistry of Bowdoin College, Me., has analyzed another "opium antidote" prepared by Dr. S. B. Collins, of La Porte, Ind. The specimen examined contained fourteen grains of morphine to the ounce.

Any would-be physiological experimenter upon vertebrated animals in Great Britain. must procure a license for himself, and must be prepared to have the place in which he works registered, if the home secretary should require it, and inspected by the inspectors to be appointed under the act whilst in certain cases the experimenter must further arm himself with special certificates. (*Brit. Med. Journal.*) In this way does the government of Great Britain encourage scientific investigation.

A California paper states that a San Francisco firm buys, at forty cents each, all the dogs which die or are killed in that city. At their manufactory the skins of the dogs are removed and sold to the tanneries; the hair is taken off and sold to the plasterers; the hide tanned, made into gloves, and sold in the market. The denuded carcass is thrown into a huge cauldron and boiled until the bones are easily separated from the flesh, when they are removed and sold to the sugar refineries, where they are ground to a fine powder and used to clarify sugar. The oil that rises to the surface of the boiling mass is skimmed off and made into cod liver oil, and the remainder is used for fattening hogs.

Book Notices.

Any book noticed herein may be had of E. B. Smith & Co., Publishers and Booksellers, Detroit, Mich.

CYCLOPÆDIA OF THE PRACTICE OF MEDICINE. Edited by Dr. H. Von Ziemssen. Vol. VI. Diseases of the Circulatory System, together with chapters on Whooping Cough, Diseases of the Lips and Cavity of the Mouth, and Diseases of the Soft Palate. Cloth; pages 1,000. 1876. New York: William Wood & Co.

Although the sixth in the prearranged order of the series, this volume is the eighth in order of publication. Its various chapters were prepared by eight distinct authors. Those on "General Indroduction to the Study of Cardiac Diseases and Diseases of the Endocardium," by Prof. Rosenstein, of Lyden; those on "Changes in Position of the Heart and Diseases of the Heart Substance," by Prof Schroetter, of Vienna; those on "Congenital Diseases of the Heart," by Prof. Sebert; those on "Diseases of the Arteries, Veins and Lymphatics," by Prof. Quinckle, of Berne; those on "Diseases of the Pericardium," by Prof. Bauer, of Munich; that on "Whooping Cough," by Prof. Steffin, of Stettin; those on "Diseases of the Lips and Cavity of the Mouth," by Prof. Vogel, of Dorpat, Russia, and those on "Diseases of the Soft Palate," by Prof. Wagner, of Leipsic. The discussion of whooping cough and diseases of the lips, cavity of the mouth and soft palate was introduced into this volume on account of the great size of volumes VII and VIII. In its mechanical execution this volume is fully equal to those preceding it. All commendation accorded them rightly applies to this.

The subjects discussed are of the highest importance. From their relative frequence and obscurity they will undoubtedly lead to a very careful study of the several chapters by all general practitioners. In the objective examination of the heart it is of the greatest moment to ascertain the exact position of its different parts, both in their relations to one another and to their surroundings. To obtain exact knowledge of these positions is a matter of much difficulty. Rosenstein adopts the results obtained by Piroyoff and Luschka by means of sections through frozen bodies, and by Joseph Meyer, who has used Grendren's method of puncture on the dead subject. The various views respecting the first sound of the heart are clearly presented. It is admitted that a muscular contraction can produce an acoustical sensation exactly similar to the sensory perception of the first sound of the heart. Still, the supposition that the first sound is membranous is well grounded, and conditions enough are given for the production of sound giving vibrations on the auriculo-ventricular valves in the transition from the low tension at the end of a diastole to the maximum tension during the ventricular systole. A whole series of pathological facts collected by Traube are explicable exactly by assuming the first sound to be membranous. Clinically it is impossible to regard the first sound of the heart a mere muscular sound. It is proper to regard the contracton of the ventricular wall and the vibrations of the tendenous cords as an auxiliary in producing the first sound of the heart.

What are the real causes of the cardiac murmurs? The investigations of Heynsius and Notlet are regarded as proving that the *primary vibrations which take place in the blood itself* are the real causes of the murmurs, and that the influence of tension and lateral pressure on these motions was nothing, while the influence of the *rapidity of the stream* was great. If the stream be only rapid enough, murmurs may be produced even in a glass tube of uniform diameter. Clinical experience also lays great weight on the *rapidity of the stream*. How shall we determine whether a murmur is endocardial or exocardial?

1. Endocardical murmurs are exactly simultaneous with one or other of the cardiac sounds. The exocardial, on the other hand, are heard after or between both sounds, and hang behind.

2. The endocardial are of a *various character*, blowing, breathing, scratching or rasping, while the exocardial are always rasping, however much the intensity may vary.

3. Exocardial murmurs are generally heard at first over the base of the heart, afterwards at the apex and over its whole extent. Endocardial do not increase so much in extent, being more local and fixed.

4. Exocardial murmurs, if at all intense, can always be felt, which is not the case to such a degree with endocardial murmurs.

Inflammations of the endocardium are divided into three classes according to their ending, viz: in ulcers, in thickenings of the membrane, or in villous formations of the connective tissue. To that form ending in ulcers the name diphtheritic is applied, because of the similarity of the ulcerative process to that which takes place in diphtheria. Usually this disease is observed in the course of acute rheumatism, and seemingly has no connection with the number of joints affected or the degree of pain. It begins after the disease of the joints has run on for some days, and the fever has begun to give way, being ushered in with a severe shivering. The diagnosis is generaly overlooked. Charcot pointed out the fact that the auscultory sounds by which it is recognized go through a number of stages. As to prognosis, there is no case of recovery on record. Of the causes and frequency of valvular defects only very general statements can be made. Defects of the auriculo-ventricular valves are so far different from those of the aortic valves, that the former, if their origin be sub-acute, may often be referred to rheumatic arthritis, pregnancy and acute exanthematous diseases. Aortic valvular, on the other hand, are incomparably oftener developed in an insidious way, and are so frequently met in the most intimate connection with changes in the walls of the vessels, that one is more inclined to refer their origin to those forces which we know from experience to cause atheroma, namely, to *age*, *alcoholism*, *gout* and chronic nicotine intoxication. Mitral affections usually occur more in youth, and aortic more frequently in advanced years. The frequency of valvular defects is in direct proportion to the frequency to those circumstances which cause them. As to the general effects of valvular defects, "there is always a mechanical effect on the relations of the circulation in general, which thus brings about secondary anatomical changes both in the heart itself and in distant organs. The mechanical effect produced by all valvular defects is a diminution of the quantity of blood which reaches the aortic system with each ventricular systole. This effect is most fully observed in those diseases which result in stenosis of the left ostium venosum or aorticum.

The normal medium tension of the aortic system, provided its elasticity is unimpaired, depends on its receiving the normal supply of blood, and this again depends on the equilibrium between inflow and outflow. Hence, any force which lowers the inflow and thereby the supply received by the arteries, must directly reduce the tension in the aortic system. The immediate result of a fall in the tension of the aortic system is retardation of the whole circulation, for the circulation is dependent essentially upon the difference of pressure in the arterial and venous systems, in so far as everything which raises the pressure in the aortie system, *cæteris paribus* hastens the circulation. In the given case of valvular defects this difference is not only diminished by the lowering of arterial tension, but the scale is actually turned in favor of the venous system. For the quantity of blood which the aortic system has lost collects at first, indeed, in the heart, dilating its chambers, beginning with that which lies immediately before the obstruction to the outflow, or the one which receives an abnormal supply. But when the chambers of the heart have been filled out to a certain extent, then the veins are overfilled, for, owing to their slight elasticity and great powers of expansion, they have a greater capacity than the arteries, and since the tension rises in proportion as they are more filled, the tension of the whole venous system is raised, but still never so as to counterbalance the fall in that of the arterial system, as the elasticity and capacity of the two are disproportionate."

Were it not for an increase in the force of the heart, every patient with valvular disease would exhibit the mechanical effect just described. Practically an hypertrophied heart for a time obviates more or less perfectly this ill, but sooner or later this compensation fails.

Of the multiform results from these alterations in vascular tension, those in the kidneys are most characteristic. "If in any unit of time a smaller quantity of blood flows through the glomeruli, the quantity of the secretion diminishes likewise. According to Ludwig's experiments, the quantity of water is more affected than that of the solid components. Accordingly, the volume of urine passed in twenty-four hours decreases, while the tension in the aortic system falls in valvular disease, and the solid components are relatively increased. When the urine cools, the salts of the saturated solution soon precipitate, and on the bottom of the vessel we see a deposit of urates. If the patient be well fed we find crystals of pure uric acid in the sediment. As the tension increases in the venous system the urine becomes albuminous. The quantity of albumen varies with the degree of tension. It is generally accompanied by the appearance of jelly-like sacs in the urine in the shape of hyaline cylinders." The structural changes in the kidneys that follow increase of vascular tension are clearly and tersely described.

The *prognosis* in valvular disease is unfavorable as regards total recovery, but relatively it is still favorable. The compensatory action produced by both the right and left ventricles may suffice for a long time. Cases are on record of patients who have lived over fifteen years with a valvular disease. Prof. A. Clark, of New York city, possesses a heart which at death weighed fifty-seven ounces. It was taken from a man aged twenty-eight, who when six years old was attacked with rheumatism and the valvular lesion. For twenty-two years he had led a very active life with comparative comfort. Any intervening diseases alters the prognosis very much for the worse. Young persons bear the affection better than old people. We have not space to refer to specific valvular lesions.

In treatment the indication is *to advance the development of compensation when already in existence, to maintain it as long as possible, and to moderate over-compensation.* Coffee and tea should be taken extremely weak, if at all. Spirituous liquors and too much smoking should be disallowed. To promote good digestion, etc., fresh air and moderate exercise, regular culture of the skin, perfect mental quiet, local application of cold. *To combat abnormal irritation of the heart, digitalis* is the sovereign remedy in every stage of the disease, breathing of compressed air, etc.

The chapter on palpitation of the heart contains an admirable summary of the various causes and conditions which may produce this troublesome symptom. The chapters on chronic endocarditis, and its sequelæ, aneurisms, etc., are prepared with extreme care, and will be studied by all, both surgeon and physician.

A TREATISE ON THE THEORY AND PRACTICE ON MEDICINE. By John Seyer Bristowe, M. D., London, F. R. C. P., ETC. Edited with notes by James Hutchinson, M. D. Sheep; pages, 1086. 1876. Philadelphia: Henry C. Lea.

This is a new work on the practice of medicine, and by its size and scope squarely the rival of Roberts' and Flint's works. The great success of Roberts' book probably stimulated the growth of this. In his preface Dr. Bristowe informs us that this work was written for junior practitioners and medical students. His classification is acknowledged to be artificial, to be defended only on grounds of convenience. In order to give in a readable form as much information as could be included in a limited space he adopted the following plan in writing the work. The subject of every disease was carefully read up—the knowledge thus acquired or renewed was compared with the results of his own experience, and then as full and comprehensive an account as possible was written. This method of preparation has its advantages and disadvantages, both of which appear in the book.

The entire work is divided into two parts—General Pathology and Special Pathology. Under the first we have disease defined—its etiology considered—a general account of physiological processes in health—physiological process in disease, including a full consideration of morbid growths, atrophy, degeneration, necrosis, mechanical and functional derangements, and finally the treatment of disease. The style of the author, his method and the subject are such as to render this part intensely interesting. In fact we do not remember reading an account of these subjects at once so truthful, so condensed and so entertaining. One admirable feature of the work as a whole, and part first in particular, is the prominence given to anatomical and physiological facts in their relations to disease, and its treatment. Part second is divided into eight sections and specifically treats of each disease. The sections in order are as follows: Specific febrile diseases—diseases of the skin—diseases of the respiratory organs—of the vascular system—of the digestive organs--of the genito-urinary organs—of the organs of locomotion and of the nervous system. Each section is introduced by a few general statements relating to the study of the diseases included under it. Then, if necessary, the anatomy, and physiology and pathology of the parts involved are briefly stated. Lastly, the specific diseases are considered, usually in the following order: Definition, causation, morbid anatomy, symptoms, progress, and treatment. From the peculiar method of preparation the flow of description, etc., is not checked by foot-notes for references. The details of treatment, formulæ, etc., are not given, for these the student being referred to works on pharmacy and materia medica. As a whole, we regard the book as a thoroughly good one, and taking honorable rank with Roberts'. The very full index facilitates ready reference to any particular subject. To illustrate in detail some of the author's methods, views, etc., we shall make a few brief quotations. First, as to disease—what is it? After an exposition of the various views he says: "The biography of disease comprises some special cause, and certain resultant phenomena (vital, chemical or mechanical) which are or which produce the symptoms and signs by which we recognize its presence." After some illustrations of his meaning he defines disease as "*a complex of some deleterious agency acting on the body and of phenomena (actual or potential) due to the operation of that agency.*" What are the intimate processes of disease? They consist essentially in nutritive modifications of the protoplasmic or vital elements of the tissues—that under the influence of abnormal or unwonted stimuli (including the stimulus of excessive nourishment) these enlarge or multiply or differentiate—that insufficiently stimulated or fed they undergo atrophy, or degeneration or perish, and that as a necessary consequence of such changes their functional attributes become heightened or impaired, or less profoundly modified. Thus on the one hand we get simple hypertrophy, or inflammation or heterologous growth, and on the other hand fatty, calcareous and other forms of degeneration; and then again we get functional derangements too numerous to mention, which constitute so large a proportion of the symptoms of disease." What are the conditions of overgrowth? Exaggerated afflux of blood, exaggerated accumulation of nutrient fluid, exaggerated molecular destruction and an exaggerated efflux of superabundant and effete materials. Increased afflux of blood is determined mainly by reflex dilatation of the arteries, capillaries and veins which minister to the needs of the affected part, and in a subordinate degree by increased force and frequence of the heart's contractions, and produces one form of what is known as "congestion." Increased accumulation of nutrient fluid in the extravascular tissues is due to the preternaturally abundant escape of it from the dilated capillaries, an escape in some degree doubtless dependent on the vital influence exerted by the protoplasm of the capillary walls and by the overgrowing protoplasm external to them. The tissues become consequently swollen, soft and juicy, and in greater or less degree dropsical. All vital activity, whether manifested by material changes or functional excitement, is attended with molecular disintegration, which has some exact quantitative relation with it, and hence increased vehemence of growth and of reproduction is necessarily accompanied with a proportionately increased production of effete and excrementitious matters. But, in addition, undue rapidity of cell-growth and development always involves a corresponding tendency to fall into premature decay and desolation, and hence arise fatty and other forms of degeneration, the products of which accumulate and mingle with those of molecular disintegration, so that the fluids of the affected region tend to become surcharged with innutritious waste and often noxious materials.

We have not space further to multiply quotation, nor do we think it necessary or called for. Considerations already presented will suffice to arrest the attention of those desiring such a work.

The clear, open type and other characters in its mechanical execution add not a little to the attractiveness of the work.

PRINCIPLES OF HUMAN PHYSIOLOGY. By Wm. B. Carpenter, M. D., etc. Edited by Henry Power, M. B., F. R. C. S., etc. New American, from the eighth revised and enlarged English edition, with notes and additions, by Francis G. Smith, M. D., etc. Sheep. Pages 1083. 1876. Philadelphia: Henry C. Lea.

Carpenter's physiology is well known to most of our elder readers as their college text-book. Many younger ones, also, are familiar with it, as they have read it in their preceptor's office of late years. For divers reasons it has not been a favorite text-book of the American medical student. The present edition has been prepared with the greatest care, and contains the principal results of modern physiological investigations. Industrious research is apparent on every page. As a pure compilation, it excels all its competitors, and in completeness it surpasses most. New illustrations have been added and old ones omitted, so that the book contains about four hundred. In its present shape it will prove of great value to the advanced medical student, and especially to the medical practitioner as a book of reference. Those who desire to know the methods by which physiological facts are reached need not consult Carpenter, as little or no attention is paid to this part of physiology. Results of physiological work, and deductions from these results, characterize this book. Considerable speculation and theorizing yet pervades some parts, but not enough to seriously detract from its value. Still, we are reminded of the physiologies which were standard text-books before Dalton wrote his fascinating work. The bearings of physiological knowledge upon the interpretations of pathological observations are often pointed out, and are of great interest to the practical physician. As a whole, this new edition of Carpenter occupies an important place among physiological text-books, in that it contains the most complete statement of all the important results of recent physiological investigations. Copious indices of authors and subjects are an especial feature, and will greatly facilitate its use as a book of reference.

A PRACTICAL TREATISE ON THE DISEASES, INJURIES AND MALFORMATIONS OF THE URINARY BLADDER, THE PROSTATE GLAND AND THE URETHRA. By S. D. Gross, M. D., L. L. D. D. C. L., Oxon, etc. Third edition, revised and edited by Samuel W. Gross, A. M., M. D., 1876. Cloth. Pages 575. Philadelphia: Henry C. Lea.

Among the changes in this edition are the addition of chapters on tumors of the bladder and prostate gland, by Dr. W. Gross, and the omission of the chapter on the anatomy of the urinary organs, and the appendix in relation to the prevalence of stone in the bladder and calculous disorders in the United States.

The work is divided into three parts. (1) Diseases and injuries of the bladder. (2) Diseases and injuries of the prostate gland; and (3) Diseases and injuries of the urethra. The whole is illustrated by one hundred and seventy wood cuts, most of them familiar to the readers of other works on general and special surgery. The style of the work is one well known to all readers of American medical literature, because of the numerous contributions to that literature by its distinguished author. As a whole the work is peculiarly interesting and instructive—worthy of careful study by all students of medicine and medical practitioners.

Irritability of the bladder is defined as a hyperæsthesia of the mucous membrane, by which it is rendered intolerant of the presence of urine which is voided with greater frequency than in the natural state. Among its causes are mentioned diseases of the urinary apparatus, altered state of the urine, diuretic medicines, disorder of the genital organs, disease of the alimentary canal, lesion of the brain and spinal cord, general debility, exposure to cold and heat, and disease of the pelvic viscera. Each of these causes is discussed at considerable length. Congestion of the neck of the bladder, prostate gland and seminal vesicles occasionally takes place and produces a morbid sensibility of the mucous membrane. It is characterized by a feeling of fullness in the perineum, almost uninterrupted micturition and smarting of the neck of the bladder, with scalding in the urethra. These symptoms, which are always aggravated by exercise, and even by the erect posture, are liable to be renewed by the slightest exposure to cold, by a full meal and a few glasses of wine, by drastic puragatives, and by venereal excesses.

Of the alterations in the urine, which induce vesical irritability, he says that they occur most commonly in elderly subjects, particularly such as are disposed to gout, rheumatism, and gravel. They are usually associated with disorder of the general health, indicated by dyspepsia, constipation, capricious appetite, sour eructations, coldness of the extremities, dryness of the skin, soreness in the lumbar region, neuralgic pains in various parts of the body, and a sense of burning in the urethra. The pathology of this affection is little known, the most plausible theory being that it consists in an exaltation of the nervous sensibility of the mucous membrane, similar to what is occasionally witnessed in the retina, fauces, urethra, etc. This belief is further strengthened by the fact of its frequent occurrence with a weak, scrofulous state of the constitution. In entering upon the treatment of this disorder, a strict inquiry should be made as respects its origin, etc. Indeed, there is no class of cases that demand a more thorough investigation to enable the physician to form a correct judgment upon the parts primarily affected than this. Internally, belladonna is recommended, small doses of copaiba in cases springing from gonorrhea, tinct. cantharides, in young children and hysterical girls, and the introduction of a bougie. This sketch of the chapter on irritability of the bladder will give some idea of the method pursued in this work. In the treatment of paralysis and atony of the bladder, consequent upon typhoid and other fevers, venereal excesses and general exhaustion, few remedies are so serviceable as arnica—dose of tincture, forty to sixty drops, three times a day; ergot is also highly recommended.

Speaking of catheterism, the author says: "The introduction of the metallic catheter, although apparently very simple, is one of the nicest and most delicate processes in surgery. It requires skill of the highest order, as well as the most intimate knowledge of the anatomy of the urinary organs." Surgeons who frequently have to do with the false passages, caused by lack of skill in catheterism, will emphatically commend the above statements, and regard that student's education as incomplete who has not practically learned the art.

Respecting the cases of vesical calculus, Gross endorses the view "that calculous disorders are much more common among the poor than the rich." This difference is probably due to derangement of the digestive organs, engendered by the use of unwholesome food—by irregular habits, want of cleanliness, intemperance, and deficient clothing. It is well known in the United States that this disease is most common in Ohio, Kentucky, Tennessee, and Virginia. Why this is so none can tell. It is supposed that it depends on some mysterious quality in the climate. Lack of space forbids farther quotation from this classical book. While not faultless, we know of no other work of similar nature at once so reliable in its facts and so suggestive in its deductions, to both physicians and surgeons.

EPITOME OF SKIN DISEASES, WITH FORMULÆ. By Tilbury Fox, M. D., etc. Cloth; pages 120. 1876. Philadelphia: Henry C. Lea.

This little work was designed by its author to epitomize, in short compass, the clinical features and essential points in the treatment of diseases of the skin. It is divided into three parts, viz: General Observations on Skin Diseases; the Description and Treatment of Skin Diseases, and Cutaneous Pharmacopœia. Under the first head we find a concise statement of the indications for the study of skin diseases; a description of the elementary lesions; a diagnostic chart; a description of the causes of skin disease; rules for making a diagnosis; and, lastly, the general principles of treatment. Under part second we find a brief description of the various skin diseases arranged alphabetically. It is not claimed that there is anything new in this little book, only that well known matter is presented in a manner more available to the student. As a rule we are opposed to the whole class of hand-books, etc., but certainly this one commends itself to us as an exception, and as capable of doing incalculable service to one beginning the study of cutaneous disorders.

A CENTURY OF AMERICAN MEDICINE, 1776—1876. By Edward H. Clarke, M. D., Henry J. Bigelow, M, D., Samuel D. Gross, M. D., LL. D., D. C. L., Oxon., T. Gaillard Thomas, M. D., and J. S. Billings, M. D. Cloth; pages 366. 1876. Philadelphia: Henry C. Lea.

This book is a reprint of a series of articles which have appeared in the *American Journal of Medical Science* during 1876. They cover the following distinct subjects: Practical medicine, history of the discovery of modern anæsthesia, surgery, obstetrics and gynæcology, literature and institutions. These articles were prepared with great care, and will have an abiding interest in all time to come.

We are glad to see them in book form, but regret that they are unaccompanied by even the most meagre index. Perhaps others may write up the advances made during the same century in other departments of medical science. We should like to see a complete work on the subject prepared with the same ability which characterizes the essays before us. Meantime, those desirous of preserving the best account of American medicine during the past century will do well to purchase this book.

THE STUDENTS' GUIDE TO DENTAL ANATOMY AND SURGERY. By Henry Sewill, Member of the Royal College of Surgeons, etc. Cloth; pages 200. 1876. Philadelphia: Lindsay & Blakiston.

The author says that his object in writing this book has been to facilitate the labors of the student, to lead him to desire and direct him in seeking the fuller knowledge afforded by more extended treatises. An intelligent reading of the book involves a previous acquaintance with the elementary works on physiology and surgery, etc.

Certainly the author has attained his object in so far as a work of such dimensions could accomplish it. The advanced medical student and the young practitioner would find their useful knowledge much increased by a thorough study of this work.

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